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HORNBERGER'S SERVICE 1940



GLAD. MRS. F. C. HORNBERGER

GLADIOLUS — DAHLIAS
IRIS — PEONIES

HORNBERGER'S SERVICE
Clark Street, Hamburg, N. Y.

1940 CATALOG INDEX

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ANNOUNCEMENTS

PICARDY SPORT NO. 1 (Hornberger) One of our new color selections from **PICARDY**, we listed this last season as "Belle of Picardy," but for a number of reasons we have decided to just list this under number as **PICARDY SPORT NO. 1**. We also have a number of other color sports of Picardy. You will find **PICARDY SPORT NO. 2** briefly described under New Gladiolus. Our article on Mutants and Sports will give you more detailed information along this line. We have sports of many varieties of glads. A patch of all our color sports of Minuet represents colors and shades as well as different markings, from white to purple. At some distance, they are likely to resemble a patch of seedlings, but on close inspection they will be found exactly like Minuet in all but coloring, the bulblets, production, color and shape of bulbs and bulblets, their germination, growth etc., and all other qualities are the same. In a pure color sport there is change of color only, but in some instances there may be other plant changes. We have sports or have had them in the past where such other changes were well defined.

OUR UNIT OFFERS and Special collections offered in this catalog should be of much interest to retail customers. Be sure to read these offers. If you cannot use any of them perhaps your neighbor would appreciate the opportunity. We have added many new departments this season and you will be able to secure some of the most outstanding varieties of Iris, Dahlias, Peonies, etc., as well as Health Foods and Products, if you are interested in this line. We are listing a special plant food, Hyponex; also Bloomlife, a cut flower food, and many other items of service, to your requirements.

GLADIOLUS SOCIETIES. There are a great many gladiolus societies in all sections of the U. S. If you desire special information we may be in a position to supply the information required.

PARCEL POST AND EXPRESS RATE TABLE. Parcel Post and Express rates are given this year for your convenience and for making comparisons as well as finding costs of F. O. B. shipments. This rate classification is for merchandise that is NOT PREPAID but quoted F. O. B. Hamburg, N. Y. Many customers request such shipments by mail. We are willing to ship by mail, but as there is no insurance coverage against loss by freezing, we cannot assume any responsibility for such shipments. On PREPAID PARCEL POST shipments we assume full responsibility, as such stock is prepaid by us.

IN MEMORY

We reprint the following announcement from the Florists Review of August 3 1939 for the benefit of many who did not read this notice.

MRS. F. C. HORNBERGER

Mrs. F. C. Hornberger, wife of F. C. Hornberger, gladiolus grower of Hamburg, N. Y. died July 25, 1939 after about a years illness. Mr. Hornberger has been a grower of gladiolus at Hamburg, N. Y. for twenty years or more and is the originator of several well-known commercial varieties, including Aflame, Mrs. F. C. Hornberger, and others. Within the past two years, a son and daughter, Eldred and Jean were added to the partnership, known as Hornberger's Home and Garden Service. (F.R.8-3-39)

This season you can address mail and make remittances payable to HORNBERGER'S SERVICE (Clark Street, Hamburg, N. Y.) This partnership consists of my two children and myself. We will continue to give you the best we can supply and improve our service to you in every constructive way. We sincerely thank you for all past business you have given us and we will try to merit your future patronage.



KING MIDAS
See page 12.

NEW GLADIOLUS

We give a more complete description here of several quite new glads. Some are listed in regular price list, but more briefly described there.

AMERICAN COMMANDER. (Edw. New). introduced by us in 1938 catalog. Mr. New, the originator, considers this an improved Com. Koehl for general comparisons: Produces long straight stems and very heavy, wide, green foliage, long flower head, with many open. The color is a clear medium red, with much lustre or sheen, a much brighter color than Com. Koehl. Produces spikes from all size bulbs and propagates fast. **WON THE AWARD OF MERIT** from the Empire State Gladiolus Society, the only variety to receive this award from this society to date. Retail prices listed in regular price list. We list here the prices per 10, with 5 bulbs at the 10 rate. **10 No. 1, \$20.00; 10 No. 2, \$16.00; 10 No. 3, \$12.00; 10 No. 4, \$8.00; 10 No. 5, \$6.00; 10 No. 6, \$4.50; Bulblets, 10 for 80c.** Larger quantities will be quoted.

MRS. CAROLINE WARNER GANNETT. (F. O. Chamberlin) We give below a description of the spike of this variety that won the **SWEEPSTAKE PRIZE** at the ESGS show at Rochester, N. Y. 1937 the first time this variety was shown. We quote: "The spike carried 20 buds expanding into blooms measuring seven inches and more in diameter. The color is a blending of lavender and pink, highlighted in the upper portion of the floret with tones of mahogany and gold, with each of the two throat petals of the bloom marked with a large patch of glowing cherry. The holding and keeping quality of the bloom considered exceptional." See price list of prices for bulbs and bulblets.

NEW GLADIOLUS—Cont.

PICARDY SPORT NO 1. (Hornberger) Listed last year under the name of "Belle of Picardy," which we decided to change to PICARDY SPORT No. 1 this season. As described in the regular price list where it is listed this year, this variety is a most beautiful creamy buff pink, same size, habits and other qualities of Picardy except color. This is Picardy, only with a color so different as to appear like an entirely different variety. For more details about sports, read my article about them in this catalog.

PICARDY SPORT No. 2. (Hornberger) This is still another of our several color sports of Picardy. It is like Picardy in everything except color. I will class for this brief description as a shade of terra cotta, much darker than the color of Picardy. We do not have this in quantity to list for sale this year.

NEW GLADIOLUS FROM WENTWORTH GARDENS, AND WE GIVE THEIR DESCRIPTIONS. THESE ARE KINYON GLADIOLUS. THEY ARE LISTED AT NET PRICES, BUT PREPAID.

WENOAH. (Exhib.) 75-80 days, Salmon pink. Winner of the Am. Home Ach. Medal, the Mich. Hort. Soc. Medal and the MGSC Certificate. Will open 10 to 14 blooms, about 4 ft. tall, good grower and propagator. **Large, \$1.00 each. Medium bulb, ea. 85c. Small bulb, ea. 75c. Bts., 10c each. 10 for 75c.**

EMBLEM OF PURITY. Decorative, ruffled pure white, 10 to 12 round ruffled waxy textured blooms on medium tall stem. Am. Home Ach. Award. **Large \$2.50. Medium, \$2.00 each. Small, \$1.50 each. Bulblets, 20c each.**

REFLECTION (Exhib.) 85 days, Lavender, a clear light lavender, with no markings, 6-8 open, large bloom on tall plant, 5 ft. or more. Strong grower and good propagator. **Large, each 75c. Medium, each 40c. Small bulbs, 20c each. Bulblets, 2 for 10c; 10 for 40c.**

WHITE SPIRE (Exhib.) 90 days, a tall, pure white, with very large flowers, often 5 inches, pure white with no markings, fine foliage, often 20-24 buds to spike. **Large, each—Same prices as for "Reflection," listed above.**

NEW PALMER VARIETIES AND OTHER NEW GLADS.

In the list below are varieties offered by Mr. Elmer Gove. We give his descriptions and his retail prices on these items. Abbreviations used (Ex) for exhibition variety, (Com) commercial variety, (Bts) bulblets; prices are prepaid.

RETAIL PRICE LIST		Bulbs per	Large	Medium	Small
ALADDIN (Palmer) (Ex) (Com) Wonderful tall ruffled salmon, 8 to 10 open flowers, very strong and robust, (Bts. 2 for 25c; 10, \$1.00.	1	\$1.50	\$1.00	\$.60	
	10	12.00	8.00	4.50	
ALGONQUIN (Palmer) (Ex) (Com) Early tall brilliant glowing scarlet, Award of Merit, C. G. S. 1935. (Bts) 1 for 25c; 5 for \$1.00.	1	2.50	1.60	1.00	
	10	20.00	12.50	8.00	
AMBERGLOW (Palmer) (Com), Finest amber yellow, 6-8 open, tall spike, 16-18 buds. (Bts) 10 for 15c; 100 \$1.25.	1	.25	.15	.10	
	10	2.00	1.20	.80	
AMULET (Palmer) (Com), A clear medium orange, med. size ruffled bloom, 5-6 open. (Bts) 2 for 25c; 10 \$1.00.	1	1.50	1.00	.60	
	10	12.00	8.00	4.50	
ANGELUS (Palmer) (Com) a pure pink with cream throat, somewhat frilled, 6 or more open. 18 buds. (Bts) 10 for 25c; 100, \$1.50.	1	.25	.15	.10	
	10	2.00	1.20	.80	

RETAIL PRICE LIST

	Bulbs per	Large	Medium	Small
BEACON (Palmer) (Com) a tall salmon scarlet with cream throat, 8-10 open, somewhat ruffled bloom. (Bts) Pkg. 15c. 100, 35c.	1 10	.10 .80	2- .15 .50	2- .10 .30
BERNECE (Gray) (Com) Very early, bronze yellow, med. large ruffled flowers. (Bts) Pkg. 10c; 100, 35c.	1 10	.10 .80	2- .15 .50	2- .10 .30
CAMELLIA (Palmer) (Com) (Ex) Tall moderately ruffled, blush pink, darker feather, 6-8 open. (Bts) 10, 25c; 100, \$2.00.	1 10	.30 2.40	.20 1.60	.10 .80
CARILLON (Palmer) (Com) Moderately ruffled beautiful clear rose, white throat, 6-8 open. (Bts) 2 for 25c; 10, \$1.00.	1 10	1.50 12.00	1.00 8.00	.60 4.50
COLOSSUS (Mitsch) (Com) Large, early salmon with red blotch. (Bts) 20 for 25c; 100, \$1.00.	1 10	.20 1.60	.15 1.00	2- .15 .60
DAMARIS (Beatrice Palmer) (Ex) Tall exhibition Burgundy red, 8-10 open blooms. (Bts) 6 for 25c; 100, \$3.00.	1 10	.50 4.00	.30 2.40	.20 1.60
FIREFLY (Palmer) (Com) New early flaming scarlet, white lines on lip. (Bts) 15 for 10c; 100, 50c.	1 10	.50 4.00	.30 2.40	.20 1.60
HELENA (Palmer) (Ex) (Com) Tall, late lavender pink. 8-9 open. 16-20 buds	1 10	.25 2.00	.15 1.20	
JASMINE (Palmer) (Com) New ruffled lemon yellow, no markings, 6-7 med. large blooms open. (Bts) 1 for 20c; 10, \$1.50.	1 10	2.00 15.00	1.25 10.00	.75 6.00
KING LEAR (Palmer) Very early, most beautiful purple with silver line on edge of all petals, heavy ruffling. (Bts) 1 for 20c; 10, \$1.50.	1 10	1.50 12.00	1.00 8.00	.60 4.50
MARGARET BEATON (Towney) (Ex) (Com) Pure white with small scarlet blotch, 6 or more large blooms open. (Bts) 2 for 25c; 12, \$1.00.	1 10	1.00 8.00	.60 4.80	.40 3.20
RECADO (Palmer) (Ex) Exhibition var. tall spikes, a smoky, rosy ash, flecked with orange, darker blotch; 10 large blooms open. (Bts) 10 for 25c; 100, \$2.00.	1 10	.50 4.00	.30 2.40	.20 1.60
SAHARA (Palmer) (Ex) Light russet with soft blotch of cream, 10 med. size blooms on tall spike. (Bts) 10 for 25c; 100, \$2.00.	1 10	.25 2.00	.15 1.20	.10 .80
SANDRA (Palmer) (Com) Shrimp pink, amber throat, somewhat similar to Picardy in habit of growth, etc. (Bts) 20 for 15c; 100, 50c.	1 10	.25 2.00	.15 1.20	.10 .80
THE MOGUL (Palmer) (Ex) Huge salmon orange, darker hues in throat, 8-10 open, slightly ruffled. (Bts) 25 for 10c; 100, 35c.	1 10	.15 1.20	.10 .80	2- .15 .50
TIMBUCTOO (Zimmer) (Ex) (Com) Early mid-season, fine dark rose red. 6-9 open. (Bts) 2 for 25c; 10 for \$1.00.	1 10	1.50 12.00	1.00 8.00	.60 4.50
UNCAS (Webster) (Ex) Exhibition burnt orange, 17 to 20 buds, 8 open, somewhat ruffled bloom. (Bts) 3 for 20c; 10, 50c.	1 10	.50 4.00	.30 2.40	.20 1.60

PARCEL POST AND EXPRESS RATES

WE GIVE BELOW PARCEL POST ZONE RATES TO AND INCLUDING ZONE 5 and up to 40 pounds weight. For more distant zones, we advise express shipment. However if customer wants the zone rates, they can be had at the local P. O. Below we give approximate weight of 100 bulbs of each size when packed. We have added what we think the boxes and packing material will add to this estimate. 100 No. 1, 8 lbs.; 100 No. 2, 5 lbs.; 100 No. 3, 3 lbs.; 100 No. 4, 1 1/2 lbs.; 100 No. 5, 1/2 lb.; and No. 6, about 1/3 lb; Bulblets, about 2 lbs. per one quart, or perhaps 1/3 pound per 1000; these are estimates.

ZONES						ZONES					
		1-2	3	4	5			1-2	3	4	5
Wt. in lbs.	Local	Up to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1,000 miles	Wt. in lbs.	Local	Up to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1,000 miles
1	\$0.07	\$0.08	\$0.09	\$0.10	\$0.11	21	\$0.17	\$0.30	\$0.49	\$0.80	\$1.17
2	.08	.10	.11	.14	.17	22	.18	.32	.51	.84	1.23
3	.08	.11	.13	.17	.22	23	.18	.33	.53	.87	1.28
4	.09	.12	.15	.21	.27	24	.19	.34	.55	.91	1.33
5	.09	.13	.17	.24	.33	25	.19	.35	.57	.94	1.39
6	.10	.14	.19	.28	.38	26	.20	.36	.59	.98	1.44
7	.10	.15	.21	.31	.43	27	.20	.37	.61	1.01	1.49
8	.11	.16	.23	.35	.49	28	.21	.38	.63	1.05	1.55
9	.11	.17	.25	.38	.54	29	.21	.39	.65	1.08	1.60
10	.12	.18	.27	.42	.59	30	.22	.40	.67	1.12	1.65
11	.12	.19	.29	.45	.64	31	.22	.41	.69	1.15	1.70
12	.13	.21	.31	.49	.70	32	.23	.43	.71	1.19	1.76
13	.13	.22	.33	.52	.75	33	.23	.44	.73	1.22	1.81
14	.14	.23	.35	.56	.80	34	.24	.45	.75	1.26	1.86
15	.14	.24	.37	.59	.86	35	.24	.46	.77	1.29	1.92
16	.15	.25	.39	.63	.91	36	.25	.47	.79	1.33	1.97
17	.15	.26	.41	.66	.96	37	.25	.48	.81	1.36	2.02
18	.16	.27	.43	.70	1.02	38	.26	.49	.83	1.40	2.08
19	.16	.28	.45	.73	1.07	39	.26	.50	.85	1.43	2.13
20	.17	.29	.47	.77	1.12	40	.27	.51	.87	1.47	2.18

EXPRESS RATES: Latest tariffs of the Railway Express Co. from Hamburg, N. Y. to several cities, from coast to coast to give you an approximate cost of Express as compared with Parcel Post, the express rate includes insurance up to a \$50.00 value, in rate charged, with Parcel Post the insurance is extra and is 5c. for values under \$5.00 and 10c. for values from \$5.00 to \$25.00 and more above that value, and does not cover loss by freezing, while all express shipments are covered against loss by freezing. These rates are 2nd class express rates, and cover bulbs, roots, seeds, packaged health foods, etc. The distances given are approximate and you can make your estimates from these figures. The cost of 1-2 lbs. to the last four cities is given as 25c.-30c. etc., the cost of either 1 lb. or two lbs. For values over \$50.00 by express, there is an extra value charge of 10c. This is insurance coverage.

City	Approximate Miles	1-2 lbs.	14 lbs.	22 lbs.	31 lbs.	43 lbs.	100 lbs.
Erie, Pa.	80	25c	\$.25	\$.35	\$.45	\$.60	\$1.20
Albany, N. Y.	300	25c	.34	.49	.66	.88	1.86
Cleveland, O.	180	25c	.30	.42	.56	.74	1.53
Boston, Mass.	450	25c	.39	.57	.76	1.02	2.19
Chicago, Ill.	530	25c	.42	.62	.84	1.13	2.44
Des Moines, Ia.	875	25-30c	.54	.80	1.09	1.49	3.27
Denver, Col.	1595	25-30c	.84	1.28	1.77	2.43	5.45
Portland, Oregon	2615	30-35c	1.32	2.04	2.83	3.90	8.87
Los Angeles, Calif.	2740	30-35c	1.30	2.00	2.78	3.83	8.71

Washington, D. C. is about 400 miles and Jacksonville, Fla., about 1200 miles. All stock quoted f. o. b. Hamburg, N. Y. That is ordered shipped by Post, goes at customers own risk and Prepaid Post, at our risk. Hamburg, N. Y. is a suburb of Buffalo, N. Y. Figure approximately same distance as for Buffalo, N. Y.

HEALTH FOODS—BOOKS—VITAMIN PRODUCTS, ETC.



If you are interested in PURE FOOD PRODUCTS, HEALTH FOODS AND PRODUCTS, write for our complete lists of prices and publications that we have for local distribution. Practically all of these products are well adapted to mailing. We handle a selected list of pure food products, vitamin products, health candies or food candies, health books, Vegetable Juice machines and pure vegetable cosmetic products, etc., etc. A post-card request will bring this information to you promptly. We request that you order this stock about two weeks prior to the time you want delivery. This will permit us to fill orders more promptly. Should we happen to be out of some item or items when order is received, this plan permits us to get all merchandise to you in prime condition which is our plan and policy to supply only that which is of the highest quality and merit. ALL MERCHANDISE UNDER THIS HEAD is quoted f. o. b. Hamburg, N. Y. This merchandise is NOT PREPAID, but we deliver FREE in first zone by PARCEL POST, or up to 50 miles from Hamburg, N. Y. If an order of 10 lbs. is to be sent to a customer in Zone 4, that is 300 to 600 miles from Hamburg, N. Y. the postage on a ten pound order is 42c, but as we deliver free in Zone 1, the postage required for Zone 1 is deductible, so in this instance, 18c postage to Zone 1 can be deducted, leaving the NET postage to be added for zone 4, only 24c plus the insurance fee if order is to be insured. This fee is .05c for values less than \$5.00 and 10c for values of \$5.00 to \$25.00.

CHART OF SCIENTIFIC DIET, Bragg. Price 10c, postage 2c extra.

HEALTH COCKTAILS, THE NEW WAY TO HEALTH, BEAUTY AND YOUTHFULNESS, Bragg. Complete information on raw juice therapy, price 25c.

THE ART OF FEMININE LOVELINESS, Bragg. Contains all the real beauty "secrets" of lovely women. Price \$1.00, weight packed 1 lb. Postage extra.

AWAKEN HEALTH AND HAPPINESS, Bragg. Published to sell for \$3.00. Introductory price is \$1.00. Shipping weight 1 lb., postage extra.

PAUL C. BRAGG'S PERSONAL HEALTH FOOD COOK BOOK. Every worthwhile food is completely covered, including meat, fish, vegetables, vegetarian and raw food diet. Price \$1.00, shipping weight 1 lb. Postage extra.

BUILDING HEALTH AND YOUTHFULNESS NATURE'S WAY. A book for those who wish to rebuild their health with diet, exercise, breathing and sunbathing. Price \$1.00, shipping weight 1 lb., postage extra.

NATURES WAY TO HEALTH: A Juice Therapy key to the properties of fruit and vegetable juices, covering the vitamins, principal minerals, chemical and physical properties and the indicated use for each. **Prepaid, Each 25c.**

VITAMINS AND MINERALS: A composite key to the vitamins, their synonyms, chemical formulae, chemical and physical properties, stability, body storage, unit of potency, biological functions, results of deficiency, principal sources and average unitage per four ounces of the more important food stuffs. **Prepaid, Each 25c.**

JUICEX: Electric Juice Extractor, finished in green, economical to use, simple to clean, compact and sturdy. We use one in our home and would not wish to be without one. Price f. o. b. Hamburg, N. Y. by Express, not prepaid, \$49.50. Delivery in about ten days. Leaflets available.

FLETCHERIZER: Improved 1940 Model. Features—MIXES, CHOPS, LIQUIDIZES. White Porcelain-Enamel Base; Non-Tip; 2 Speed Motor; Extra Powerful; Stainless Steel Cutting Blades; Heavy Glass Bowl; Easily Cleaned. **GUARANTEED.** By Express, F. O. B. Here. Not Prepaid. Price \$14.95 Each.

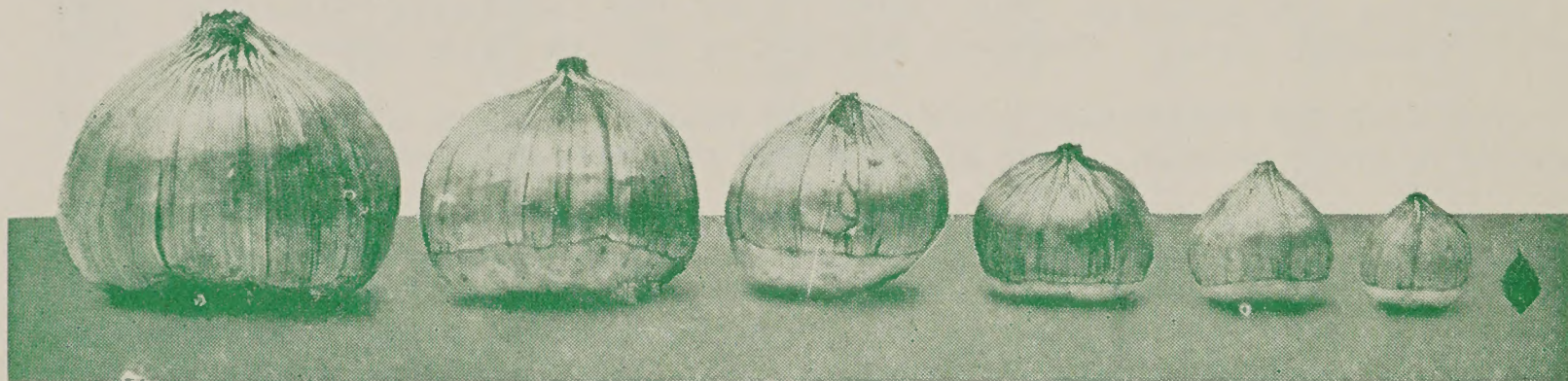
VITAMIN B₁, FOR PLANTS; See pages 25 and 27.

TERMS OF SALE

TERMS OF SALE: CASH with order, or 25% cash with order and the balance before shipment is made, or we will send the balance due, C. O. D. We prepay all retail or prepaid items listed, but only in the U. S. A. To foreign countries, postage must be added for all glads listed at less than 10c each for large bulbs. On higher priced bulbs we prepay.

HOW TO SHIP: In very cold weather it is best to ship by express as the Express Company has coverage against loss by freezing, while Parcel Post will not insure against loss by freezing. As a rule in more moderate weather we ship by Parcel Post. For that reason, it is a good plan to leave Parcel Post shipments wait until about March 1, when it is quite safe to ship to most sections.

DISCOUNTS: We do a cash before delivery business, and our discounts are figured in the items themselves, as you will likely find by making some comparisons. However, we do give EXTRA COUNT on orders, as many others do on Prepaid or Retail Orders. This will likely average around ten per cent. This is for glads listed under name in Prepaid List. There is no such extra count offered in collections. However, it is possible there will be some extra count and in some instances depending on size of order and the list prices of varieties you may find we have added much more than 10% in extra count, size or value. Wholesale prices are not subject to this extra count as they are offered at lower net prices. However, there will be some overcount on all our glad listings. Where we cannot give this overcount equal on all varieties, we will add enough extra of some items to make up the extra value offered.



Size No. 1 to 2 (Large).

No. 3 to 4 (Medium). No. 5 to 6 (Small).

BULB GRADES: Above we give the six (6) standard sizes of glad bulbs and at extreme right a bulblet is shown. LARGE BULBS are composed of the two larger sizes shown, or No. 1-2 assorted; MEDIUM BULBS are No. 3-4, and SMALL BULBS are the No. 5-6 size above.

SIZE OF BULBS WE OFFER AT RETAIL are Large bulbs $1\frac{1}{4}$ " and up; Medium bulbs are $\frac{3}{4}$ " to $1\frac{1}{4}$ ", and small bulbs are less than $\frac{3}{4}$ " in diameter, they average around one-half inch, but even this size, while flowering much later than large bulbs, do produce an abundance of smaller spikes with very nice bloom that can be used for many decorative purposes and these small bulbs grow into the larger flowering bulbs to be used the next season. Large bulbs of any variety, flower first, and it takes medium bulbs of the same variety, perhaps 10 days longer to flower than the large bulbs. Both large and medium bulbs give fine blooms. I think we sell more medium than any other size for cut flower growing, and sometimes a spike from a No. 3 will be as good or better than from a No. 1, depending of course, on many factors.

ERRORS: No doubt all places of business make some errors. If you discover we have made an error, please let us know about it and we will do all we can to make a proper adjustment. We do not have many complaints, but we know there may be instances where the customer just overlooks the matter.

FREE NAPHTHALENE: On Prepaid Retail orders only and only when requested by customer. We will add to each order the "Flakes" required. Full information about handling is given in our Thrip article.

REGULAR PREPAID PRICE LIST

PLEASE READ TERMS OF SALE BEFORE ORDERING. MARK ORDER BLANK IF WE CAN SUBSTITUTE GLADS.

ABBREVIATION: Bts. for bulblets. Pkg. for package.

EXPLANATION: 2 bulbs. See AFLAME. 2 large 10c (3-10) 3 medium 10c etc.

BULBLETS: Listed per 100, are available 50 at one-half 100 prices.

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
AFLAME (Hornberger) P. G. type, giant begonia rose, many open, often 5-6 in. blooms. (Bts) pkg. 10c; 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
ALIGHT (Hornberger) exactly like AFLAME except color, a lighter shade with large white throat. (Bts) 100, 40c.	1 10	.10 .80	2- .10 .40	3- .10 .30
ALAYNE (Kinyon) a ruffled light rose, a lovely shade of pink. (Bts) 100, 40c.	2 10	.15 .60	.10 .30	5- .10 .20
ALBATROSS (Pfitzer) tall large flowered white, many open. 5x. (Bts) 100, 20c.	2 10	.10 .45	4- .12 .25	.10 .15
ALLENWOOD (Hornberger) Tall, large flowered "Phipps" pink, many open. (Bts) 100, 20c.	2 10	.10 .45	4- .12 .25	10- .12 .20
AIDA (Pfitzer) Tall, many open, a rich deep violet "blue." (Bts) 100, 30c.	2 10	.10 .45	3- .10 .25	5- .10 .20
AMERICAN COMMANDER (Edw. New) A more complete description given under new varieties, color med. red, tall. (Bts.) 10 for 80c.	1	2.50	1.50	.75
AMADOR (Kingsley) a rich bright vivid red. (Bts.) 100 for 25c.	2 10	.10 .45	3- .10 .30	5- .10 .20
AVE MARIA (Pfitzer) A tall light to med. "blue" many open, fine var. (Bts.) 100 for 20c.	2 10	.10 .45	4- .12 .25	10- .12 .12
BAGDAD (Palmer) Tall, very large bloom, color smoky old rose. (Bts.) 100, 20c.	2 10	.10 .45	4- .12 .25	10- .12 .12
BARCAROLE (Palmer) a highly ruffled clear orange. (Bts) 1 for 15c; 10, \$1.00	1 10	.75 6.00	.50 4.00	.30 2.40
BEAUTIFUL OHIO (Hullibarger) a deep mauve lavender. (Bts) 25 for 25c; 100, \$1.00	1 10	.20 1.75	.15 1.25	.10 .70
BEOWULF (Nitchman) A strong vigorous late mauve lavender rose. (Bts) 20 for 25c; 100, \$1.00.	1 10	.15 1.25	.12 .90	.10 .70
BETSY BOB UP (Canine) A sport of Betty Nuthall, same as Nuthall except color which is a fine buff cream. (Bts) 100, 20c.	2 10	.10 .45	4- .12 .25	10- .12 .12
BETTY NUTHALL (Salbach) a tall late salmon pink, very good. (Bts) 100, 20c.	2 10	.10 .45	4- .12 .25	10- .12 .12
BILL SOWDEN (Fallu) produces extra large flowers, bright clear red color. (Bts) 100, 20c.	2 10	.15 .60	3- .12 .30	6- .10 .15

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
BIT O' HEAVEN (Crow) a tall spike of bright orange. (Bts) 25, 10c.	1 10	.19 .80	2- .15 .60	2- .10 .40
BLAU SCHONHEIT (Pfitzer) also listed as Blue Beauty, a tall large, flowered medium "blue" 10 (Bts) 15c; 100, \$1.00	1 10	.20 1.60	.15 1.20	.10 .80
BLEEDING HEART (Brown) A tall light pink with red blotch. (Bts) 100, 20c.	2 10	.10 .45	4- .10 .25	10- .12 .12
BLUE DANUBE (Pfitzer) A good light "blue" tall spikes. (Bts) 100, 20c.	2 10	.10 .45	4- .12 .25	6- .10 .15
BLUE ADMIRAL (Christ) One of the best of the deep "blue" varieties. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .30	5- .10 .20
BOB WHITE (Zimmer) A tall white with rose throat markings. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
CANBERRA (Errey) A tall, large late yellow, with many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	10- .12 .12
CHAS. DICKENS (Pfitzer) Tall spikes, of Aster purple, strong plants. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
CHIEF RED BIRD (Dr. Scheer) Bright red, many open, large bloom. (Bts) 10, 90c.	1	1.00	.60	.30
COMMANDER KOEHL (Pfitzer) A tall, large flowered, extra dark red, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
CORONADO (Briggs) A heavily ruffled white, with lace-like purple throat. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .25	6- .10 .15
CATH. COLEMAN (J. Coleman) Tall plant, large bloom of salmon rose, many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
CREAM SEEDLING , No. 717 (Hornberger) Seedling under No. liked by many, a tall, large flowered cream. (Bts) 100, 40c.	1 10	.50 4.00	.40 3.00	.30 2.00
CREVE COUER (Young) Tall spike, color a burnt orange. (Bts) 100, 60c.	1 10	.12 .80	2- .15 .60	5- .20 .40
D. A. HAY (Whitely) Australian Var. tall pink with creamy white throat. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
DAMASCUS (Stevens) Smoky var. a deep rose purple with reddish blotch. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	10- .10 .10
DEBONAIR (Palmer) Tall spike, late, large La France pink, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
DR. F. E. BENNETT (Diener) A bright orange scarlet red, popular. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
DR. MOODY (Kinyon) Early light lavender, strong vigorous grower. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
DREAM O' BEAUTY (Zimmer) A strong grower, color, near American Beauty, very popular. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
DUNA (Palmer) A beautiful light clear buff color, fine variety. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
EARLY MELODY (Arenius) Tall, early, light lavender pink, many open blooms. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	10- .10 .12

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
EARLY SUNRISE (Velthueys) Tall, early and large flowered, near salmon red. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .30	5- .10 .20
EDITH ROBSON (Brown) Tall, late, light salmon rose with reddish blotch, many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
EUIDES (Errey) Large Ivory white, edges of petals blushed pink. Exhib. quality. (Bts) 100, 80c.	1 10	.12 1.00	.10 .70	2- .10 .50
EMBERS (Hornberger) A color sport of Aflame, same habits of growth, etc., except color. striped pink and cream. (Bts) 10 for 25c; 100, \$2.00.	1 10	.25 2.00	.20 1.75	.15 1.25
FRANK J. McCOY (Briggs) A tall exhib. pink many flowers open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
GARDENIA (Dr. Scheer) A new deep cream var. bright clear self color, very fine. (Bts) 1 for 20c; 10, 90c.	1	3.00	2.00	1.00
GATE OF HEAVEN (Pfitzer) A rich, ruffled, deep golden yellow, many open. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .25	6- .10 .15
GERTRUDE PFITZER (Pfitzer) Tall bright, light "blue" many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
GIANT NYMPH (J. Coleman) A splendid, tall, light salmon pink. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
GLADDIE BOY (Purple) An extra early pink with yellow throat, P. G. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
GLORIANA (Betscher) Tall, fine salmon, many open blooms. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
GLEN (Mair) a variety from Scotland, extra massive plant, color, dark pink. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
GOLDEN ANNIVERSARY (Kunderd) A large fawn yellow, with distinct blotch. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
GOLDEN CHIMES (Ellis) A nicely ruffled, clear medium yellow; (Bts) 100, 40c.	2 10	.12 .50	3- .10 .30	5- .10 .20
GRAF ZEPPELIN (Pfitzer) A deep red of good quality. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .30	5- .10 .20
HELGA A very early bright pink. (Bts) 100, 20c.	10	.40	.24	.15
HELEN WILLS (Salbach) A very tall, large flowered, creamy white. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	5- .10 .20
HELIGTUM (Pfitzer) A very tall, large flowered white, many open. (Bts) 15 for 20c.	1 10	.20 1.75	.15 1.25	.12 1.00
ISOLA BELLA (Pfitzer) A different color, new large flowered, ruffled, lilac-lavender, very fine. (Bts) 10 for 15c; 100, \$1.00.	1 10	.12 1.00	2- .15 .60	4- .15 .30
JOSEF HAYDN (Pfitzer) See Picture elsewhere in catalog. a new heliotrope "blue" with vividly contrasting deeper throat blotch. (Bts) 5 for 20c; 100, \$3.00.	1 10	.35 3.00	.20 1.75	.15 1.25

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
JOYFUL (Prof. Crow) A tall dark salmon, large flowers, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
JONKHEER VAN TETS (Pfitzer) A tall growing large white, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
KING ARTHUR (Arenius) a bright, deep violet lavender, extra large bloom, heavily ruffled. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
KING MIDAS (Herridge) A lovely new deep yellow. See photo of a planting size bloom we have reproduced elsewhere. (Bts) 15 for \$1.00.	1	1.00	.50	—
LADY MARIE (Zimmer) A tall extra early salmon, good cut flower. (Bts) 100, 20c	2 10	.10 .45	3- .10 .25	6- .10 .15
LAIDLEY (Errey) a tall pink and white, flaked crimson, many open. (Bts) 100, 30c.	2 10	.12 .12	3- .10 3- .10	5- .10 5- .10
LIGHTS OF GOLD (Hornberger) Extra early, decorative, heavily ruffled, flowers of very heavy substance, salmon pink edges with large blotch of yellow. On selected list, Trial Gardens, Univ. of Alberta. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
LUCIFER (Errey) Tall, vigorous, orange with darker throat blotch. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
MAID OF ORLEANS (Pfitzer) Tall, early, large flowered, creamy white, extra. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
MAMMOTH WHITE (Pfitzer) A tall, large flowered, white, many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
MARGARET FULTON (Ogrodnichuk) Early, rich, deep salmon pink, Commercial. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MARY ELIZABETH (Dr. Stevens) Tall, late white, extra heavy ruffled, with yellow throat. Many flowers open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
MARMORA (Errey) Large smoky grey, with a distinctive purple blotch. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
MOROCCO (Pfitzer) A large flowered extra dark mahogany red. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
MINNOCK (Mair) Extra tall, deep dark salmon, many blooms open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
MINUET (J. Coleman) Outstanding large lavender. Has been a leading commercial, a large exh. lavender, many open. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .25	6- .10 .15
MILFORD (Rides) Fine Australian var. a large, bright lavender "Blue." (Bts) 100, 40c.	2 10	.15 .60	.10 .40	3- .12 .30
MISS ALAMEDA (Salbach) Tall, soft light rose, small red blotch. (Bts) 100, 20c.	2 10	.15 .60	3- .10 .30	6- .10 .15
MISS BLOOMINGTON (Kundred) Early, tall, clear medium yellow. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
MISS NEW ZEALAND (Julyan) Extra tall, and extra large flowered glad, color, apricot salmon, suffused rose, with darker center. One of the big ones. (Bts) 100, 50c.	1 10	.12 1.00	.10 .70	2- .15 .50
MOTHER MACHREE (Stevens) An exceptional smoky var., smoky lavender, tinted cream, long spikes, many open Exhib. bloom. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .30	6- .10 .15
MRS. E. J. HEATON (Heaton) A tall, large salmon with creamy throat, many open. (Bts) 100, 25c.	2 10	.12 .50	3- .10 .25	6- .10 .15
MRS. CATH. EDWARDS (Hornberger) Tall, early large flowered, creamy white, 8-9 open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MRS. F. C. HORNBERGER (Hornberger) Late pure white, (see front cover) 105 days, plant for Sept. Heavy substance, good keeper. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MRS. LEON DOUGLASS (Diener) Extra tall, large flowered salmon pink. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MRS. RAY P. CHASE (Dr. Miller) Early tall, large flowered, cream with yellow throat, some purple flecking on buds. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MRS. S. A. ERREY (Errey) A tall, large flowered, bright orange, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
MRS. CAROLINE WARNER GANNETT (F. O. Chamberlin) Sensational new Sweepstakes prize winner, fully described under "NEW GLADS" elsewhere in this catalog. (Bts) \$5.00 each.	1	50.00	35.00	25.00
MR. W. H. PHIPPS (Diener) Tall, late, extra large flowered, salmon or shrimp pink, many open, often 10-12 or more, fine exhib. var. (Bts.) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
NEW ERA (Ellis) Heavily ruffled, lovely rose pink, many open, extra fine. (Bts) 15, 25c.	1 10	.20 1.60	2- .25 1.00	2- .15 .60
NINTH SYMPHONY (Pfitzer) A tall, very large flowered, clear bright salmon red. (Bts) 10 for 10c.	1 10	.20 1.75	.15 1.25	.10 .90
OUR SELECTION. An Australian variety, many blooms open, 8-10 or more, color, salmon red flecked deeper color. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
PEGGY LOU (Wilson) Tall, strong growing, shrimp pink, tinted rose, long flower head, with many large blooms open, habits and growth much like Picardy, has won many awards. (Bts) 25 blts. 25c.	1 10	.25 2.00	.15 1.20	2- .10 .40
PELEGRINA (Pfitzer) A dark, deep violet self, early and many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
PINK PEARL (Byvoet) An extra early bright pink, many open, fine early var. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15

VARIETY.	5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
PFITZERS TRIUMPH (Pfitzer) An extra large flowered, bright orange red. (Bts) 100, 20c.		2	.10	3- .10	6- .10
		10	.45	.25	.15
PFITZER'S MASTERPIECE (Pfitzer) Bright salmon pink, 8-10 open, lovely color. (Bts) 10, 35c.		1	.25	.20	.15
		10	2.00	1.60	1.20
PHYLLIS MC QUISTON (Stewart) A tall, large, bright rose pink, many open. (Bts) 100, 20c.		2	.10	3- .10	6- .10
		10	.45	.25	.15
PICARDY (Palmer) A tall, large flowered, salmon pink, with many open blooms, an outstanding variety for Exhib. or commercial use. (Bts) 100, 20c.		2	.10	3- .10	10- .10
		10	.45	.25	.10
PICARDY SPORT No. 1 (Hornberger) a new color sport of Picardy, exactly like Picardy except color which is a very beautiful creamy buff pink, per each.		1	5.00	5.00	5.00
PICARDY SPORT No. 2 (Hornberger) another of our selections of Picardy, described more fully under New Gladiolus. Not yet released.					
POLAR ICE (Pfitzer) A tall early, pure white with many large open blooms. (Bts) 100, 30c.		2	.12	3- .10	5- .10
		10	.50	.30	.20
PRAIRIE GOLD (Corrington) Tall, deep bronzy yellow, unusual color. (Bts) 100, 30c.		2	.12	3- .12	5- .10
		10	.50	.35	.20
PRIDE OF WANAKAH (Chriswell) A tall clear rose of good size. (Bts) 100, 20c.		2	.10	3- .10	10- .12
		10	.45	.25	.12
PURE GOLD (Dehnhoff) Tall pure yellow. P. G. (Bts) 100, 20c.		2	.10	3- .10	10- .10
		10	.45	.25	.10
PYTHIA (Kunderd) A tall, large flowered, deep red, many open. Exhib. quality. (Bts) 100, 20c.		2	.10	3- .10	6- .10
		10	.45	.25	.15
QUEEN LOUISE (Pfitzer) A large pure white		10	.45	.25	.15
RAMASES (Stevens) A tall giant flowered, deep purple. (Bts) 100, 30c.		2	.12	3- .10	6- .10
		10	.50	.25	.15
RAPTURE (Palmer) Tall, late, large flowered salmon, with creamy throat. (Bts) 100, 20c.		2	.10	3- .10	6- .10
		10	.45	.25	.15
RAQUEL (Nitchman) A tall vigorous, large flowered, buff-cream, with markings. (Bts) 100, 40c.		1	.15	.12	2- .12
		10	1.00	.70	.40
RED LORY (Errey) Very tall, large flowers of rich rose red, many open. (Bts) 100, 20c.		2	.10	3- .10	5- .10
		10	.45	.25	.20
RED PHIPPS (Briggs) A glowing bright red with many flowers open. (Bts) 100, 20c.		2	.12	3- .10	6- .10
		10	.50	.25	.15
RED PIRATE (Gelser) A tall red, with very dark contrasting blotch. (Bts)		1	.12	2- .12	3- .12
		10	1.00	.50	.30
REVERIE (Palmer) Light pink and cream, very delicate color combination. (Bts) 100, 20c.		2	.10	3- .10	6- .10
		10	.45	.25	.15
REWI FALLU (Fallu) Tall rich deep red, 6 or more massive blooms open, extra fine. (Bts) See picture elsewhere. (Bts) 100, 75c.		1	.12	2- .12	3- .10
		10	1.00	.50	.25

VARIETY. 5 at 10 rate; min. item 10c.	Bulbs Per	Large	Medium	Small
ROSEMARIE PFITZER (Pfitzer) A tall, large flowered cream and pink blending, many, open, a very lovely var. but slow prop. (Bts) 100, 50c.	1 10	.12 .90	2- .12 .50	3- .12 .30
SCHWABEN GIRL (Pfitzer) An early, lovely bright pink, with many open flowers. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
SHIRLEY TEMPLE (Pruitt) Extra tall, with huge ruffled cream bloom, with deeper throat color, many open, heavy substance, a beautiful var. (Bts) 25 for 25c.; 100, \$1.00.	1 10	.12 .80	2- .12 .50	3- .10 .25
SOUTHERN CROSS (Whitely) Tall rich red, of good substance and many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .30	5- .10 .20
SONATINE (Pfitzer) A tall, large flowered, early lustrous pink, extra fine. (Bts) 100, 20c.	2 .10	.10 .45	3- .10 .25	6- .10 .15
STAR OF BETHLEHEM (Pfitzer) A tall, large flowered exhib. and com. white, very popular. Many large blooms open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
TAIAROA (Miller) N. Z. Var., a tall smoky salmon pink, with dark blotch, many open. (Bts) 100, 30c.	2 10	.15 .60	3- .10 .25	6- .10 .25
THE BOUNTY (Nitchman) A very deep dark red	1	.15	.12	.10
TOBERSUN (Austin) A tall rich deep yellow mon pink, with dark blotch, many open. 20c.	2 10	.10 .60	3- .10 .25	6- .10 .15
TOKEN (Prof. Crow) Tall, early, salmon with a cream throat. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
TREVONIAN (Hornberger) Tall, extra large flowered, rose red, with many open blooms, fine for exhibition. (A color sport of Pythia). (Bts) 100, 20c.	2 10	.12 .50	3- .10 .30	6- .10 .15
VAGABOND PRINCE (Palmer) A tall mahogany brown, with a very distinctive flame blotch, many blooms open. (Bts) 100, 30c.	2 10	.15 .60	3- .15 .40	3- .10 .25
VEILCHENBLAU (Pfitzer) A rich deep violet "blue," many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
WARATAH (Errey) A bright orange scarlet with deeper throat blotch, many open. (Bts) 100, 20c.	2 10	.12 .50	3- .10 .25	6- .10 .15
WASAGA (Palmer) A very attractive color of deep buff, many ruffled blooms open. (Bts) 100, 25c.	2 10	.10 .45	3- .10 .25	6- .10 .15
WURTEMBERGIA (Pfitzer) A tall, heavy plant, large flowered, many open blooms, color is a fiery scarlet, with cream throat. (Bts) 100, 30c.	2 10	.12 .50	3- .10 .30	6- .10 .15
YVONNE (Krelage) A tall, early, large flowered, flesh pink, with pink blotch. (Bts) 100, 20c	2 10	.10 .45	3- .10 .25	6- .10 .15

VARIETY. 5 at 10 rate: min. item 10c.	Bulbs Per	Large	Medium	Small
ZANE GRAY (Hornberger) Color sport of the var. Marmora, a pale light grey, many open. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
ZAUBERFLOTE (Pfitzer) An early, tall var. color, Peach-rose, with red blotch, fine vivid contrast. (Bts) 15 for 10c; 100, 50c.	1 10	.12 .80	2- .15 .60	3- .15 .40
ZUNI (Mitsch) Tall, rich, sparkling, silvery rose, with large terra cotta throat, considered one of the best smokies. (Bts) 10 for 25c.; 100, \$1.50.	1 10	.30 2.40	.20 1.40	.10 .80
ZILLAH (Parkman) Early strong growing, med. yellow, about size and shape of Gate of Heaven, good com. var. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15
XYX. MIXTURE. This is a color assortment of 10 or more varieties of good glads. (Bts) 100, 20c.	2 10	.10 .45	3- .10 .25	6- .10 .15

AN ASSORTMENT OF FIFTEEN (15)

We sell 5 bulbs at the 10 rate price, but no single item for less than 10c, which is the minimum sold. Minimum order \$1.00; we will sell 5 of each of the large, medium and small, making a total of 15 bulbs of (one) variety. (any variety not listed at more than 10c each, for large bulbs; as this offer does not apply to new high priced items,) making a total of 15 bulbs of all three sizes, we will add the regular overcount as for other items, and add 5 small bulbs free to each assortment of 15, as we will put all 15 bulbs in one bag, saving time and bags, for ourselves. These are very fine values, and they give you a long season of bloom. You will receive a total number of bulbs of at least 22 on every such order of 15.

This offer has nothing to do with our unit collections, we offer on another page, this offer, is where you want all three sizes of any ONE NAMED VARIETY, listed above, all put in one bag, with the name of the variety and number of bulbs written on the bag.

YOUNG BULB COLLECTION: 25 or more varieties in mixture, not separately labeled, "young bulbs" are often referred to as bulbs grown from bulblets or small planting size bulbs. We offer for this collection all No. 4 size bulbs. These are bulbs that measure about ($\frac{3}{4}$) three-fourths inches in diameter and are the smaller grade found among our medium sizes offered elsewhere. This size produces an abundance of lovely bloom and wonderful bulb development under fair conditions. We offer in this assortment many good cut flower varieties. These will be early mid-season and late varieties, so you get a long season of bloom from these assortments. Prepaid price per 50, \$0.75; per 100 for \$1.40.

SAMPLER LOTS OF SMALL BULBS of assorted cut flower varieties. We select ten varieties, our selection, and make following offer for persons who have never grown small bulbs, just to try out in their gardens and see what each of the smaller sizes will do in production of cut flowers as well as bulb development. There is nothing more convincing than some special "test lot" such as we offer, that can be observed and checked in our own garden and these few small bulbs require so small space. Each lot can be planted in about a 2 ft. row.

SAMPLER No. 4, 10 bulbs, all different, No. 4 size, $\frac{3}{4}$ " to 1" for 25c.

SAMPLER No. 5, 20 bulbs, 2 each of 10 kinds, No. 5 size $\frac{1}{2}$ " to $\frac{3}{4}$ " for 25c.

SAMPLER No. 6, 30 bulbs, 3 each of 10 kinds, No. 6, size $\frac{1}{4}$ " to $\frac{1}{2}$ " for 25c.

MAKE UP YOUR OWN ASSORTMENTS

UNITS OF FIVE.



By this plan you make up your own assortments or sets. We offer (5) varieties in each Unit and you order an entire unit, as you would order a separate variety. Just order as many unit numbers as you require and as many bulbs and sizes as you wish. However, we cannot divide any quantity offered and we cannot add to or change any variety in these units. We offer these in some instances 30 to 40% or more below the list prices of the varieties in some of these units, so we cannot make changes. Large bulbs are offered in Units of 10, 25 and 50 bulbs. We cannot divide any quantity. Medium bulbs are offered in units of 20, 50 and 100 bulbs, and Small bulbs are offered in units of 35, 80 and 200 bulbs. The (5) varieties in each unit are not separately labeled, but all five varieties are put in one bag and all the variety names of that unit written on the outside of the bag. We reserve the right to substitute on all units we offer. If we are short one or more varieties, when we do substitute, we will use a similar color and cross out the variety we cannot furnish, and write in the name of the variety added. By marking the different units you order from this list and planting in numerical order in the garden and leaving a small space between each lot, you do not even have to stake and label and your catalog will be a record and a guide to varieties you have planted. The catalog descriptions will assist you to identify the varieties at flowering time. In many instances you will note we have used distinctly different colors or types to make up these units and with only five varieties mixed together it should not be difficult to determine the names of many of them. When we plant many separate lots of bulbs of 2 to 10 or more it takes much valuable time in staking, labeling, etc. This time is given when we plant, dig bulbs, and when we clean them and fumigate them, so any plan that permits us to save so much valuable time and gives us good practical results at such a big saving of money as we offer here, should be most welcome. Unit prices are all prepaid by us.

UNIT PRICES: For the TWENTY UNITS we offer below: LARGE BULBS, 2 bulbs of each unit variety, a total of 10 large bulbs of any (one) of the twenty units offered, 40c.; 5 bulbs each, a total of 25 large bulbs for 80c.; 10 bulbs each, "Unit Variety," a total of 50 large bulbs for \$1.50. **UNIT PRICES OF MEDIUM SIZE:** 4 bulbs of each "unit variety," a total of 20 medium bulbs for 40c.; 10 bulbs of each "unit variety," a total of 50 medium bulbs for 80c.; 20 bulbs of each "unit variety," a total of 100 medium bulbs, \$1.50. **UNIT PRICES OF SMALL BULBS:** 7 bulbs of each "unit variety," a total of 35 small bulbs for 40c.; 16 bulbs of each "unit variety," a total of 80 bulbs for 80c.; 40 small bulbs of each "unit variety" a total of 200 small bulbs for \$1.50.

Prices Net. Count is Offered Net, But There is Likely to be Plenty Overcount.

UNIT NO. 1. THE BIG FIVE: AFLAME; CANBERRA; MAMMOTH WHITE; PICARDY; TREVONIAN.

UNIT NO. 2. RED GLADS: COM. KOEHL; DREAM O'BEAUTY; GRAF ZEPPELIN; RED PHIPPS; RED LORY.

UNIT NO. 3. WHITE GLADS: ALBATROSS; MAID OF ORLEANS; MAMMOTH WHITE; MRS. F. C. HORNBERGER; QUEEN LOUISE.

UNIT NO. 4. "BLUE" GLADS: AIDA; AVE MARIA; BLUE DANUBE; PELEGRINA; VEILCHENBLAU.

UNIT NO. 5. SHOW GLADS: ALIGHT; BAGDAD; MAID OF ORLEANS; PICARDY; TREVONIAN.

UNIT NO. 6. DISTINCT COLORS: AMADOR; ALBATROSS; AVE MARIA; GATE OF HEAVEN; SCHWABEN GIRL.

UNIT NO. 7. MEDIUM HEIGHT GLADS: ALAYNE; DREAM O'BEAUTY; DUNA; BILL SOWDEN; KING ARTHUR.

UNIT OFFERS—Cont.

UNIT NO. 8. TALL GLADS: ALIGHT; ALBATROSS; ALLENWOOD; CHAS. DICKENS; DEBONAIR.

UNIT NO. 9. EARLY GLADS: AIDA; EARLY MELODY; LADY MARIE; MISS BLOOMINGTON; GLADDIE BOY.

UNIT NO. 10. BI-COLORS: BLEEDING HEART; EDITH ROBSON; LIGHTS OF GOLD; MARMORA; ZANE GREY.

UNIT NO. 11. SMOKIES: BAGDAD; DAMASCUS; MOTHER MACHREE; TAIA-RORA; ZANE GREY.

UNIT NO. 12. RUFFLED GLADS: LIGHTS OF GOLD; MARY ELIZABETH; KING ARTHUR; GATE OF HEAVEN; WASAGA.

UNIT NO. 13. PINK GLADS: FRANK MC COY; GLEN; GIANT NYMPH; MARGARET FULTON; PHYLLIS MC QUISTON.

UNIT NO. 14. LARGE GLADS: MRS. E. J. HEATON; JOYFUL; MRS. LEON DOUGLASS; PFITZERS TRIUMPH; AFLAME.

UNIT NO. 15. CUT FLOWER GLADS: MARGARET FULTON; MAID OF ORLEANS; MINUET; PICARDY; SONATINE.

UNIT NO. 16. CREAM AND YELLOW: MRS. RAY CHASE; CREAM SEEDLING. H. 717; RAQUEL; ZILLAH; TOBERSUN.

UNIT NO. 17. LAVENDER SHADES: BERTY SNOW; BEOWULF; DR. MOODY; EARLY MELODY; MINUET.

UNIT NO. 18. RED, WHITE AND BLUE: RED PHIPPS; PYTHIA; J. VAN TETS; MRS. F. C. HORNBERGER; VEILCHENBLAU.

UNIT NO. 19. UNUSUAL COLORS: DAMASCUS; GOLDEN ANNIVERSARY; OUR SELECTION; THE BOUNTY; WARATAH.

UNIT NO. 20. TALL PINKS: WM. CUTHBERTSON; CATH. COLEMAN; D. A. HAY; MINNOCK; MRS. LEON DOUGLASS.

UNIT NUMBER SPECIAL COLLECTIONS—YOUR SELECTION OF UNIT NUMBERS: LARGE BULBS. your selection of any 10 out of the twenty listed. 10 Large of each Unit, a total of 100 Large bulbs, listed at \$4.00, the Spec. Col. prices is \$3.50. Any 15 Units listed, your selection, a total of 150 Large bulbs, listed at \$6.00, the Spec. Col. price \$5.00 prepaid.

MEDIUM SIZE BULBS: Your selection of 10 out of any of the 20 Units listed, 20 Medium bulbs of each Unit, a total of 200 Medium bulbs, listed at \$4.00, the Spec. Col. price, \$3.50; Any 15 Units, your selection of Units, a total of 300 Medium size bulbs, listed at \$6.00, the Spec. Col. price \$5.00 Prepaid.

SMALL BULBS: Your selection of 10 out of the 20 Units listed, 35 Small bulbs of each Unit, a total of 350 small bulbs, listed at \$4.00, the Spec. Col. price, \$3.50. Any 15 Unit numbers, your selection, a total of 525 Small bulbs, listed at \$6.00, the Spec. Col. price \$5.00 prepaid.

Unit offers are really labeled collections, as the variety name of each unit is written on the bag, but the varieties are not separately labeled, as each Unit contains 5 varieties.

5X SPECIAL COLOR ASSORTMENT. 50 Varieties in a mixture will have 50 or more different shades, colors and color combinations. To those who wish many colors in lots of 50 or more bulbs this assortment should prove very satisfactory. It contains early, midseason and late varieties, so you do not have 50 different colors open at one time, but you do have that many varieties, that will flower over a period of perhaps two months. 50 bulbs of 50 kinds, \$1.75; 100 bulbs of 50 kinds, \$3.00 prepaid in U. S.

WHOLESALE PRICES—NOT PREPAID

Quoted f. o. b. Hamburg, N. Y. and subject to prior sale, and all conditions beyond our direct control. Terms of Sale given elsewhere in catalog. NOT LESS THAN 25 BULBS OF A SIZE AND VARIETY AT 100 RATE: 250 OR MORE AT 1000 RATE. BULBLETS 250 at 1000 rate, one pint bulblets at quart rate. Abbreviations used: Q. for quart, M. for 1000. (***) Com. rating. NO STOCK SOLD ON OPEN ACCOUNT. (Charge Accounts). Parcel Post at Customers risk.

VARIETY	Per	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bts.
AFLAME **	100	\$2.00	\$1.50	\$1.00	\$.80	\$.40	\$.30	M. .60
	1000	.....	.....	.....	.....	3.50	2.50	Q. 1.50
AIDA, early **	100	2.00	1.50	1.00	.80	.40	.30	M. .80
ALBATROSS **	100	2.00	1.60	1.00	.80	.40	.30	M. .60
	1000	16.00	14.00	8.00	6.00	3.00	2.00	Q. 1.50
ALIGHT **	100	3.00	2.00	1.50	1.00	.80	.60	M. .30
ALLENWOOD **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	18.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
ALAYNE **	100	4.00	3.00	2.50	2.00	1.50	1.00	M. 4.00
AMADOR **	100	2.50	2.00	1.00	.80	.40	.30	M. 1.00
AVE MARIA **	100	2.00	1.40	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
BAGDAD **	100	2.00	1.60	1.00	.80	.40	.30	M. .60
	1000	16.00	14.00	8.00	6.00	3.50	2.50	Q. 1.50
BEAUTIFUL OHIO **	100	15.00	12.00	10.00	8.00	7.00	5.00	M. 9.00
BEOWULF **	100	10.00	8.00	6.00	4.00	3.00	2.00	M. 7.00
BETSY BOB UP ***	100	2.00	1.50	1.20	1.00	.60	.40	M. .75
	1000	16.00	12.00	10.00	8.00	4.00	3.00	Q. 1.50
BETTY NUTHALL ***	100	2.00	1.50	1.00	.80	.40	.30	M. .50
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.00
BILL SOWDEN **	100	.....	1.60	1.00	.80	.40	.30	M. .60
	1000	.....	14.00	8.00	6.00	3.00	2.00	Q. 1.50
BLEEDING HEART **	100	2.00	1.50	1.00	.80	.40	.30	M. .80
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 2.00
BLUE DANUBE **	100	2.00	1.50	1.00	.80	.50	.40	M. 1.00
BLUE ADMIRAL ***	100	2.40	2.00	1.40	1.20	.80	.60	M. 1.50
BOB WHITE **	100	2.00	1.50	1.00	.80	.40	.30	M. 1.00
CANBERRA **	100	2.00	1.50	1.00	.80	.40	.30	M. .80
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 2.00
COMMANDER KOEHL ** ..	100	2.50	2.00	1.60	1.00	.60	.40	M. .60
	1000	.....	.....	.....	.....	5.00	3.00	Q. 1.50
CHARLES DICKENS *** ..	100	2.00	1.50	1.00	.80	.60	.50	M. .80
	1000	16.00	12.00	8.00	7.00	5.00	4.00	Q. 2.00
CATH. COLEMAN **	100	2.00	1.50	1.00	.80	.50	.40	M. .80
CORONADO *	100	3.00	2.50	2.00	1.50	1.00	.80	M. 1.00
CREAM SEEDLING **	100	20.00	15.00	10.00	8.00	6.00	5.00	M. 9.00
DAMASCUS *	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	15.00	10.00	7.00	5.00	3.00	2.00	Q. 1.00
DEBONAIR ***	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
DR. F. E. BENNETT *** ..	100	2.00	1.50	1.00	.80	.60	.40	M. .60
DR. MOODY, early *** ..	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50

VARIETY	Per	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bts.
DREAM O'BEAUTY ***	100	2.50	2.00	1.20	.80	.40	.30	M. .60
	1000	.....	.....	8.00	6.00	3.00	2.00	Q. 1.50
DUNA **	100	2.00	1.60	1.00	.80	.60	.40	M. .60
EARLY MELODY ***	100	2.50	2.00	1.20	.80	.40	.30	M. .60
	1000	20.00	16.00	9.00	6.00	3.00	2.00	Q. 1.50
EDITH ROBSON **	100	2.50	2.00	1.20	.80	.40	.30	M. .80
	1000	20.00	16.00	8.00	6.00	3.00	2.00	Q. 1.80
FRANK MC COY **	100	2.40	2.00	1.20	1.00	.60	.40	M. 1.00
GATE OF HEAVEN **	100	3.00	2.00	1.20	1.00	.60	.40	M. 1.00
	1000	25.00	18.00	10.00	8.00	4.00	3.00	Q. 3.00
GERTRUDE PFITZER *	100	2.00	1.50	1.00	.80	.60	.40	M. .60
GLADDIE BOY **	100	2.00	1.50	1.00	.80	.60	.40	M. .60
GLORIANA **	100	2.00	1.50	1.00	.80	.....	.....	M. .60
	1000	15.00	10.00	8.00	6.00	.....	.....	Q. 1.50
GLEN (Mair) **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
GOLDEN ANNIVERSARY *	100	3.00	2.50	1.50	1.00	.60	.40	M. 1.00
GOLDEN CHIMES **	100	3.00	2.50	2.00	1.70	1.00	.80	M. 1.00
GRAF ZEPPELIN **	100	2.00	1.50	1.20	.80	.40	.30	M. .60
	1000	16.00	12.00	9.00	6.00	3.00	2.00	Q. 1.50
HELGA, early **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
ISOLA BELLA **	100	8.00	6.00	4.00	3.00	2.00	1.00	M. 7.00
JOYFULL (Crow) **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
J. VAN TETS **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
KING ARTHUR **	100	2.50	2.00	1.50	1.20	.80	.60	M. 1.25
LADY MARIE **	100	2.00	1.50	1.00	.80	.....	.....	M. .60
extra early	1000	16.00	11.00	8.00	6.00	.....	.....	Q. 1.50
LAIDLEY **	100	3.00	2.00	1.50	1.00	.80	.60	M. 1.50
LIGHTS OF GOLD **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	10.00	8.00	6.00	3.00	2.00	Q. 1.50
LUCIFER *	100	3.00	2.50	2.00	1.50	1.00	.80	M. 1.50
MAID OF ORLEANS ***	100	1.80	1.40	1.00	.80	.50	.40	M. .60
	1000	16.00	12.00	9.00	6.00	3.50	2.50	Q. 1.50
MAMMOTH WHITE **	100	2.50	2.00	1.50	.80	.40	.30	M. .60
	1000	20.00	16.00	9.00	6.00	3.00	2.00	Q. 1.50
MARGARET FULTON ***	100	2.00	1.50	1.00	.80	.60	.40	M. .60
MARY ELIZABETH **	100	2.50	2.00	1.50	1.00	.70	.60	M. 1.00
MILDRED LOUISE **	100	.....	.....	.....	1.00	.70	.40	M. 1.00
MINNOCK (Mair) **	100	3.00	2.50	1.50	1.00	.60	.40	M. 1.00
MINUET ***	100	2.50	1.50	1.00	.80	.60	.40	M. 1.00
	1000	20.00	12.00	9.00	6.00	4.00	3.00	Q. 2.50
MILFORD **	100	4.00	3.00	2.40	2.00	1.20	1.00	M. 2.00
MISS ALMEDA ***	100	2.50	2.00	1.20	1.00	.60	.40	M. .80
	1000	20.00	16.00	10.00	8.00	4.00	3.00	Q. 2.00
MISS NEW ZEALAND **	100	6.00	5.00	4.00	3.20	2.60	1.75	M. 1.50
MISS BLOOMINGTON ***	100	2.40	2.00	1.20	.80	.40	.30	M. .60
	1000	20.00	14.00	10.00	6.00	3.00	2.00	Q. 1.50
MRS. CATH. EDWARDS**	100	2.00	1.50	1.00	.80	.60	.40	M. .60
MRS. E. J. HEATON ***	100	2.40	2.00	1.60	1.20	1.00	.80	M. 1.00
MRS. F. C. HORNBERGER	100	2.50	2.00	1.00	.80	.50	.40	M. .60
**	1000	20.00	16.00	8.00	6.00	3.50	2.50	Q. 1.50

VARIETY	Per	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bts.
MRS. LEON DOUGLASS **	100	2.00	1.50	1.00	.80	.....	.....	B. .60
	1000	16.00	12.00	8.00	6.00	.....	.....	Q. 1.50
MRS. RAY P. CHASE **	100	2.50	2.00	1.00	.80	.40	.30	M. .60
	1000	20.00	14.00	8.00	6.00	3.00	2.00	Q. 1.50
MRS. S. A. ERREY **	100	2.00	1.50	1.00	.80	.....	.....	M. .60
MOTHER MACHREE **	100	2.40	2.00	1.20	.80	.....	.....	M. 1.00
MOROCCO *	100	.....	2.00	1.60	1.20	1.00	.70	M. 1.00
MR. W. H. PHIPPS **	100	2.00	1.00	1.00	.60	.40	.30	M. .60
NEW ERA **	100	15.00	12.00	10.00	8.00	5.00	.....	.....
NINTH SYMPHONY **	100	15.00	12.00	10.00	8.00	5.00	.....	.....
OUR SELECTION *	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
OUR EXHIB. MIXTURE ..	100	3.00	2.00	1.50	1.00	.80	.50	M. 1.00
PEGGY LOU ***	100	20.00	17.00	13.00	10.00	7.00	6.00	M. 6.00
PELEGRINA **	100	2.00	1.60	1.20	1.00	.70	.50	M. .80
PFITZER'S TRIUMPH **	100	2.00	1.50	1.00	.80	.....	.....	M. .60
	1000	16.00	12.00	8.00	6.00	.....	.....	Q. 1.50
PHYLLIS MC QUISTON	100	2.00	1.75	1.50	1.00	.80	.60	M. 1.00
***	1000	18.00	14.00	8.00	6.00	4.00	3.00	M. 2.50
PICARDY ***	100	1.60	1.20	.80	.60	.40	.30	M. .50
	1000	14.00	10.00	6.00	4.00	3.00	2.00	Q. 1.00
POLAR ICE **	100	2.40	2.00	1.60	1.20	1.00	.80	M. 1.00
PRAIRIE GOLD *	100	4.00	3.00	2.40	2.00	1.60	1.00	M. 1.00
PRIDE OF WANAKAH **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
PURE GOLD *	100	2.00	1.50	1.00	.80	.40	.30	M. .60
PYTHIA (Kunderd) **	100	2.00	1.50	1.00	.80	.40	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
RAMASES *	100	3.00	2.00	1.50	.....	.....	.....	M. 1.00
RAQUEL *	100	9.00	7.00	6.00	4.00	2.00	1.00	M. 7.00
RED LORY **	100	2.50	2.00	1.50	1.00	.80	.60	M. .80
RED PHIPPS ***	100	2.50	2.00	1.40	1.00	.60	.40	M. 1.00
	1000	22.00	16.00	10.00	6.00	4.00	3.00	Q. 3.00
REVERIE **	100	2.50	2.00	1.00	.80	.60	.40	M. 1.00
REWI FALLU **	100	6.20	5.15	4.10	3.00	2.00	1.50	M. 5.00
SCHWABEN GIRL ***	100	2.00	1.50	1.10	.80	.40	.30	M. .60
	1000	16.00	12.00	9.00	6.00	3.00	2.00	Q. 1.50
SHIRLEY TEMPLE **	100	5.00	4.00	3.00	2.00	1.50	1.00	M. 5.00
SOUTHERN CROSS **	100	2.00	1.60	1.20	1.00	.80	.60	M. 1.00
SONATINE ***	100	2.00	1.60	1.00	.80	.60	.40	M. .80
	1000	16.00	12.00	8.00	6.00	4.00	3.00	Q. 1.50
STAR OF BETHLEHEM	100	4.00	3.00	2.40	1.60	.80	.60	M. 2.00
***	1000	32.00	24.00	20.00	12.00	6.00	4.00	Q. 6.00
TAIARORA *	100	4.40	3.40	2.60	1.60	1.20	1.00	M. 1.00
TOBERSUN **	100	2.00	1.60	1.20	.80	.60	.40	M. .80
TOKEN **	100	2.50	2.00	1.50	1.00	.80	.60	M. 1.00
TREVONIAN **	100	2.60	2.00	1.60	1.00	.80	.60	M. 1.50
	1000	22.00	16.00	14.00	8.00	6.00	4.00	Q. 4.00
VAGABOND PRINCE **	100	4.00	3.00	2.40	2.00	1.60	1.20	M. 2.00
VEILCHENBLAU ***	100	2.00	1.50	1.00	.80	.60	.40	M. 1.00
	1000	16.00	12.00	8.00	6.00	4.00	3.00	Q. 2.50

VARIETY	Per	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bts.
WARATAH *	100	3.00	2.50	1.50	1.00	.60	.40	M. 1.00
WASAGA **	100	2.00	1.60	1.00	.80	.50	.30	M. .60
	1000	16.00	12.00	8.00	6.00	3.50	2.00	Q. 1.50
WURTEMBERGIA **	100	3.00	2.50	2.00	1.50	1.00	.80	M. 1.00
YVONNE, early **	100	2.00	1.50	1.00	.80	.50	.30	M. .60
	1000	15.00	12.00	8.00	6.00	3.00	2.00	Q. 1.50
ZANE GREY *	100	2.50	2.00	1.00	.80	.....	.....	M. .60
	1000	20.00	15.00	8.00	6.00	.....	.....	Q. 1.50
X. Y. Z. MIXTURE *	100	2.00	1.50	1.00	.70	.40	.30	M. .50
10 or More Vars.	1000	15.00	12.00	8.00	5.00	3.00	2.00	Q. 1.00

COMMERCIAL GLAD. RATINGS

SYMBOLS USED. (***) (**) (*)

Most varieties listed may be used for some cut flower or other decorative purpose, however there are a number of varieties, due to their colors or other qualities, make them more desirable for specialized cut flower purposes, so we have graded all these varieties into the classification to which we think they belong, when grown for cut flower purposes of a commercial nature. For roadside stands, some that graded lowest as commercials may sell better than those that grade highest, all depending on what your retail customer wants. However, if you sell directly to florists, it is well to use the varieties marked as most desirable for this purpose, following each variety name or directly under the variety. We will use asterisks as follows: Three asterisks after a variety name will indicate the most outstanding Commercial as PICARDY.*** Two asterisks.—example, AFLAME.** Good for commercial use but not so desirable as the first selection, and one asterisk,—example, MOROCCO.* Varieties so marked, may produce as fine spikes as any others, and due to color or other qualities, are not so desirable for commercial cut flower growing, but among these will be found some real exhibition quality when well grown. For example OUR SELECTION.*—It often opens 8-10 or more, but its color is not so desirable for regular cut flower production, however with roadside stands and direct to consumer trade, perhaps many of these will sell as well if not better than the higher rated glads.

GROWER'S TRIAL OFFER: YOUR SELECTION of 10 bulbs of each of 10 varieties in No. 3 size bulbs, NOT PRICED HIGHER THAN \$1.00 per 100 for No. 3's, all separately labelled. NOT PREPAID. Price \$1.20.

LARGER LOTS: Your selection of 50 bulbs of each variety of 10 varieties in No. 3 size bulbs, NOT PRICER HIGHER THAN \$1.00 per 100 for No. 3 size (500) for \$4.00; 1000 for \$8.00. Not prepaid.

Tartar Emetic—A New Spray For Gladiolus Thrip

From Florists Review, November 24, 1938, we quote the formula given by (Watson) University of Florida. His formula was 4 pounds of Tartar Emetic, 16 pounds of brown sugar to 100 gallons of water.

For small quantity this will require approximately 2 ounces of Tartar Emetic, one-half pound sugar and 3 gallons of water, mixed and dissolved together. Apply when foliage is dry, with any sprayer that will produce a mist like spray, with some pressure. This as I understand it, is considered far superior to many former sprays used for glads.

JAPANESE AND SINGLE PEONIES

L'ETINCELANTE. (Dessert) Fl. (Single) Tall, midseason, very large, single, very bright pink, each petal having a lighter, almost silvery border, stamens bright golden yellow, wonderful keeper, reliable home cut flower. Each \$1.00.

LE JOUR (Shaylor) Very Fl. early midseason. Tall, very large, white single, center, a broad ring of golden yellow stamens, perhaps the finest white. Each \$1.50.

KING OF ENGLAND. (Kelway) Fl. (Japanese Peony) Early midseason, tall, dark red, Buff staminoides, streaked with dark rose pink, very large bloom, wonderful keeper as home cut flower, considered one of the best of the Japs. Each 75c.

CHOICE DAHLIAS



DAHLIA—LITTLE BILLY

We offer below what we consider a very choice list of Dahlias, the prices quoted are per single root, prepaid. Delivery begins in early April. Abbreviations — (ID) Informal Decorative; (FD) Formal Decorative; (C) Cactus; (SC) Semi-cactus; (P) Peony; (B) Ball.

LITTLE BILLY (Wallace) Min. (FD) Very free flowering, color—yellow and salmon rose. See reproduction of photograph at left. **Roots, \$1.00 each.**

CALIFORNIA IDOL (ID) (Ballay) Giant flowered, a light clear yellow, one of the easiest of the big exhibition yellows to grow, has good stems. **Roots, each \$1.00.**

CALIFORNIA ROSE (ID) (Ballay) a bright salmon rose, early and of large size, very profuse bloomer, with long stiff stems on tall plants. **Root, ea. \$1.00.**

CAVALCADE (FD) (Groll) A medium sized early, free flowering dahlia, with fine stems, the color is a deep rose with tones of rosy magenta. **Root, ea. 50c.**

CHEMARS ORANGE BEAUTY (FD) a bright orange color. **Root, each 50c.**

CITY OF WELLSTON (ID) An American Beauty Rose color. **Root, ea. 50c.**

EDITH BERYL. Gold reverse rose color. **Root, ea. 35c.**

FRAU BRACHT (SC) Considered one of the finest on the market, a clear light primrose yellow of good size. **Root, ea. 50c.**

HUNTS VELVET WONDER (ID) (Hunt) One of the big ones, deep flowers of dark rosy magenta shading to true purple, a strong grower. **Root, ea. 50c.**

JAMES KIRBY (ID) (Badety) A bright rich cardinal red with darker shadings, a tall grower, and good keeper. **Root, ea. 25c.**

JANE COWL (ID) (Downs) A leading commercial and exhibition flower, large deep flowers of buff, gold and salmon, with good stems. **Root, ea. 25c.**

JERSEY BEAUTY (FD) (Waite) One of the most widely grown commercial dahlias, prominent at shows, the color is a rich eosine pink. **Root, ea. 25c.**

JOSEPHINE G. (SC) (Ruschmohr) One of the most consistent performers, medium sized flowers of a pleasing shade of rose pink, lightly tipped yellow. **Root, ea. 25c.**

KEMPS VIOLET WONDER (ID) (Kemp) tall plants, color, pansy purple, flowers of large size on good stems. **Root, each 35c.**

KENTUCKY (FD) Salmon pink sport of Jersey Beauty. **Root, ea. 25c.**

MRS. GEORGE LE BOUTILLIER (ID) (Rushmohr) One of the few good exhibition "reds" large flowers on long stems, has been shown with 14" bloom. **Root, ea. \$1.00.**

MRS. I de VER WARNER (FD) Beautiful mauve pink, free flowering. **Root, ea. 25c.**

MYRA HOWARD (ID) Yellow and gold, tinted salmon, very large. **Root, ea. 35c.**

TALL BEARDED IRIS



We offer a short list of the newer and better irises; Height in inches is given, but this is variable, and is largely influenced by soil, age of clumps, cultivation, and climatic and other factors. S. in description means the three standard or upright petals. F. means the falls, or the three downfaling petals. Our regular shipping season here is from June 20th to September 1st. Late plantings should be well mulched the first season. Tall Bearded Iris should have good drainage, and the rhizome, or fleshy root should not be planted too deep, but quite near the soil surface from which the roots grow down into the soil.

ALTA CALIFORNIA.—48" One of the tallest and largest new yellow irises. Magnificent in mass effect, very free flowering, a deep yellow. **Each 35c.**

AMBERIA. One of the finest and largest of early flowering yellow irises, a bright canary yellow, very free flowering. **Each 25c.**

BLUE GOWN.—48" A rich deep blue, with brilliant golden beard, huge flowers of uniform coloring. **Each 20c.**

BLUE VELVET.—46" Intense deep blue, appears like blue velvet, one of the most beautiful and outstanding irises. **Each 25c.**

BRONZE BEACON.—50" Late, S—golden bronze, F—Indian Lake with heavy bronze veining at the throat, very free flowering. **Each 35c.**

BRUNO.—36" Late, has been sold as high as \$50. per root, one of the worlds finest irises, large flowers of heavy substance. S—bronze heliotrope, F—rich velvety violet-purple. **Each 20c.**

BEUCHLEYS GIANT.—50" Early, an Iris Giant, and one of the ten largest, immense light medium blue. **Each 40c.**

CINNABAR.—42" Awarded the silver medal of the Am. Iris Society, a uniform deep rich, velvety dark red. **Each 25c.**

CLARA NOYES.—36" Early, one of the most outstanding of the newer irises, a rich blend of "Talisman Rose" colors, won the Grand Prize, Rockefeller Centre, in 1936, color a blend of peach and apricot tones. **Each 25c.**

CUPAVO.—42" Fragrant, awarded Silver Medal, Eng. Iris Society. One of the largest irises grown, a superb red toned bi-color. **Each 50c.**

DAUNTLESS.—42" Winner of the Dykes Memorial Medal, highest International honors. One of the finest and purest red-toned irises, prodigious bloomer. Has sold in the past for \$35.00. **Each 40c.**

DEPUTE NOMBLOT.—48" Winner of the Dykes Memorial Medal, highest international honors, of gigantic size, very outstanding. S—coppery red, blushed golden bronze. F.—rich claret crimson. **Each 40c.**

DESERT GOLD.—30" Fragrant, early. Given an Award of Merit by the Am. Iris Society, very free flowering, large soft yellow flowers. **Each 25c.**

EL CAPITAN.—40" Fragrant, early, one of the Iris Giants, flowers of mammoth size, color is medium blue, with heavy substance. **Each 25c.**

FRIEDA MOHR.—Fragrant, early, a deep pink of large size, a prize winner, the huge flowers often 7 inches, has sold for \$25. per root. **Each 20c.**

GRACE WAYMAN.—34" S.—lavender violet, F.—velvety pansy violet. **Each 20c.**

HELIOS.—44" Awarded Cert. of Merit, also a special prize of the Iris Com. of the Nat. Hort. Society of France, large flowers, color soft lemon yellow. **Each 25c.**

INDIAN CHIEF.—40" Early, an outstanding brilliant red toned Iris, color is red blended with bronze. **Each 25c.**

JEAN CAYEAUX.—36" Winner of the Dykes Memorial Medal, highest International honors, a marvelous blending of Havana and coffee brown. **Each \$1.25.**

KING JUBA.—40" "Honorable Mention" Am. Iris Society, produces huge flowers. S.—old gold, F.—Dahlia carmine, very free flowering. **Each 25c.**

KING MIDAS.—28" Early, one of the most beautiful colorings, a golden buff and garnet brown bi-color blend. **Each 25c.**

MRS. VALERIA WEST.—40" Fragrant, introduced at \$65. Flowers of huge size and heavy substance, color a rich brown red, and crimson blend. **Each 25c.**

PAULETTE.—54" One of the tallest and largest of light blue toned irises, has been sold for \$35. per plant. **Each 35c.**

PINK SATAN.—46" Honorable Mention by the Am. Iris Society, has been sold for \$40., a fine pink toned iris. **Each 25c.**

RAMASES.—42" Winner of the Dykes Memorial Medal, highest international honors, the coloring is a blending of pink and soft yellow. **Each 25c.**

RUBEO.—48" S.—deep glistening rose, F.—deep maroon, huge flowers and very outstanding. **Each 45c.**

SACRAMENTO.—Given Honorable Mention by the Am. Iris Society, color white, heavily bordered with edging of red-purple, one of the largest irises. **Each 25c.**

SAN DIEGO.—46" Honorable Mention by the Am. Iris Society, one of the most outstanding of the "deep blues." Flowers are of huge size. **Each 35c.**

SAN FRANCISCO.—44" Early, Winner of the Dykes Memorial Medal, highest international honors, has been sold for \$35. The color is white with edging of lavender blue. **Each 25c.**

TRUE DELIGHT.—36" A superb white "Picata" with border of bright pink, fine for cut flowers, and produces a charming mass effect. **Each 25c.**

VALOR.—50" Fragrant. Award of Merit by the Am. Iris Society, the general color effect being a rich deep, dark blue-violet bi-color. **Each 25c.**

VERT GALLANT.—50" Winner of the Dykes Memorial Medal, highest international honors, a prodigious bloomer, very outstanding, S.—soft rose. F.—Dahlia carmine with one-eighth inch border of soft rose. **Each 35c.**

AUTUMN FLOWERING IRIS.

These bloom in the spring and (in most sections) again in the fall.

BLACK MAGIC.—28" Finest and the most profuse bloomer in this class, the color an intense deep blue violet, with a velvety lustre and dark sheen. **Each \$1.00.**

ELEANOR ROOSEVELT.—26" A rich coloring of purple. **Each 25c.**

ULTRA.—18" Brilliant ultramarine blue, one of the best fall bloomers. **Each 40c.**

VITAMIN B₁

(THIAMIN CHLORIDE)

MERCK

FOR PLANTS: The Pure Crystalline Substance; See Page 27 for prices; FOR INDOOR AND OUTDOOR GARDENING: We offer Vitamin B₁ for your experimental work.

"PRESS REPORTS:" Roses transplanted in full bloom—Giant Daffodils—Tulips with 36 inch stems, Hyacinths with flower heads more than a foot long,—Quick development and maturity of

seedlings,—seemingly miracle-like results in transplanting; (1) one gram will make 26500 gallons of solution. Detailed instructions and more complete Press Reports with each order. See page 27.

A CHOICE SELECTED LIST OF PEONIES



Selected to give you very free flowering varieties, we use Fl. after a variety to indicate floriferous qualities. You will find this symbol connected with each variety we list. We have also kept in mind, good commercial qualities and many listed below are among the leading commercial peonies. They will be indicated by (Com) indicating commercial variety, or more largely used for such purpose. Peonies are best planted in the fall, after about the middle of September here, and we offer the following list, all 3 to 5 eye standard divisions, for delivery beginning September 15 and later. You can plant in September-October or as late as soil is in workable condition.

The first season, following planting, many plants are likely to produce buds, but it is best to dis-bud these and give your plants the very maximum chance to make good development. The second season, your plants will begin to produce nice blooms and will increase in size of clump from year to year until ready to divide, perhaps in five or six years. Once established they are very dependable for a profusion of beautiful flowers. All varieties listed priced per single, 3 to 5 eye division, prepaid after September 15. Orders of \$2.00 up received before June 1, take a discount of 10% from this list. Ratings as 8.5 etc. are ratings by Peony society.

ADOLPHE ROSSEAU (Des. Mech.) Fl. Tall early midseason. Double type, dark red, very large bloom, with long stems. **Per each \$1.00.**

AVALANCHE (Crousse) Fl. (Com.) Late mid-season, double blush white, with crimson edge to few petals, extra strong grower. **Each 50c.**

DUCHESSE DE NEMOURS (Calot) Fl. (Com.) Early, double, creamy white, getting more white as bloom opens, tall grower, dependable. **Each 50c.**

EDULIS SUPERBA (Lemoine) Fl. Extra early, double, old rose pink, an extra deep pink, commercial. **Each 50c.**

FESTIVA MAXIMA (Mieliez) Fl. Early, (Com.) double, white, with crimson flakes, on a few of the central petals, very large, strong and tall. **Each 50c.**

FLOW'RET OF EDEN (Neeley 1924) Very Fl. Early midseason, double type, light rose pink shading to flesh pink at center, large bloom, medium height. An outstanding new variety, beautifully shaded. **Each \$3.00.**

FONTENELLE (Rosenfield) Fl. Early, double, brilliant crimson, clear bright color, tall, good commercial, good keeping qualities. **Each 50c.**

GEORGIANA SHAYLOR (Shaylor) Fl. Late midseason, double, light rose pink, very large bloom, vivid crimson marks at center, rated 8.9. **Each 75c.**

GRANDIFLORA (Richardson) Fl. Very late, double, very large, bright pink, one of the last to bloom. Rated 8.8. **Each \$1.00.**

LADY ALEXANDRA DUFF (Kelway) Fl. Midseason, large, double, pale blush pink, yellow stamens, a very charming peony. **Each 75c.**

MADAME CALOT (Mieliez) Fl. Early, (Com.) tall, large, double, very light old rose pink, with creamy tints, darker center, marked with crimson. **Each 50c.**

MAD. JULES DESSERT (Dessert) Fl. Tall, very large, double, late midseason, flesh white, few stamens in center reflect yellow glow. Extra. **Each 75c.**

MARTHA BULLOCH (Brand) Fl. Late, tall, double extra large, bright old rose pink, perhaps the finest quality of any of such immense size. **Each \$1.50.**

MONS MARTIN CAHUZAC (Des.) Fl. early midseason, double, maroon crimson, overcast with a dark silky luster, considered best dark peony. **Each \$1.50.**

SARAH BERNHARDT (Lemoine) Fl. Late, double, dark rose pink, edged lighter pink, very large bloom, a lovely shade. Rated 9.0. **Each 75c.**

SOLANGE (Lemoine) Moderately Fl. late, double cream white, suffused with buff and pale salmon pink, rated 9.7. **Each 75c.**

THERESE (Dessert) Fl. Midseason, very large, double, old rose pink, illumined by a golden glow in depth of bloom, rated 9.8. **Each \$1.50.**

ROOTONE

Reg. U. S. Pat. Off.

Rootone, A Hormone Powder. Dip in the powder and set in propagating bed. Approved by STATE EXPERIMENT STATIONS and leading growers. A dry powder, keeps for years in the dry state. Rootone is a root-forming stimulant when applied to cuttings, seeds or bulbs. It is not a fertilizer or plant food. 2 Oz. Jar treats up to 3000 cuttings, etc. Prepaid for \$1.00. 1 Lb. Can, Growers' Size, treats up to 20,000 cuttings, etc. Prepaid \$5.00.

HYPONEX: For growing plants without soil, as well as for feeding pot plants growing in soil and for use in the garden for extra plant feeding; also used in Greenhouses that grow plants by soilless culture methods. Complete printed instructions, describing three methods of soilless culture: SAND CULTURE METHOD, SUB-IRRIGATION CULTURE and WATER CULTURE METHOD. Not prepaid at listed prices. The weight is given on which you can figure postage. Prices f. o. b. Hamburg, N. Y. Larger quantity prices given on request.

3 ounce can, postage extra .02c.....per can \$.40
1 pound can, add postage.....per can \$1.00
10 pounds in bulk, postage or express extra.....\$8.00

Bulk quantity prices on application.

VITAMIN B₁ (thiamin chloride) FOR PLANTS: To be used for your experimental work, for outdoor and indoor gardening, when used outdoors 1000 gallons are soon used up, so it is more economical to purchase the larger units, the cost per gal. is very low. 1/20 gram will make over 1200 gallons of solution, Extras, you will require will be a glass eyedropper, that costs about five cents and a few tooth picks, Full instructions with each order, we send an extra glass vial. **Prepaid Prices; 1/20 gram, \$1.00; One fourth gram \$3.00; One half gram \$5.00; One gram, \$9.00.**

BLOOMLIFE: (Reg. U. S. Pat. Off.) A CUT FLOWER FOOD. No after change of water, no cutting of stems, just add extra water as needed. The chemical remains in the container and furnishes nourishment to blooms. In a test we made, using plain water in one vase and the Bloomlife solution in the other we have produced large seed pods on the glad. stems, after the flowers had dried up, but were left to remain in the solution. 10c per pkg., enough for one quart of mixture.

RAT SCENT: An entire whole grain mixture, scented with a preparation that attracts rodents. Will quickly dispose of rats, mice and moles. We have used it many years to keep our bulb storage free of mice, etc. Very simple and easy to handle and use, and we find effective. This is not mailable but must be sent by Express. Rates have been lowered on small packages by express company recently and two fifty cent boxes of Rat Scent weigh about 2 pounds, packed for shipment, 3 pounds and to Albany, N. Y. a distance of more than 300 miles the Express will be about 25c. We offer at 50c per box. Not prepaid.

NAPHTHALENE FLAKES: We have these available for customers who cannot locate them nearby. The price is 10c per pound, subject to advance. If it advances we will have to charge you the extra advance. Not prepaid.

WOODEN TREE LABELS: Painted white on one side and copper wired. Good for at least one season. Handy for labeling glads. You can write on painted side with a common lead pencil. We use them for field labeling. 100 prepaid for 50c. 1000 prepaid for \$3.00.

COPPER OR ALUMINUM LABELS: We have both kinds at one price. Specify which is desired. They are about 3 3/4" long and about 3/4" wide and you emboss the words on same with any blunt piece of metal. On lots of 100 or more we include a stylus for embossing. \$1.00 per 100 prepaid; 1000, \$9.00 prepaid. We will include small quantity at 1c each if you wish to try a few before you purchase 100 or more. They have a heavy copper wire for attaching to stake or tree and will last for years. For year around labeling.

ROTOTOX. For spraying glads, soaking bulbs, and other spraying purposes, free booklet and information write direct to, Rototox Co., 8119 Yale Street, East Williston, N. Y.



ALBATROSS BULBLETS:

Planted in May and the photograph taken in September, 1937.

BRIEFS ON GLAD CULTURE

Glads require plenty of sunlight and well drained soils. The under drainage should be good. If a piece of land stays very wet a long time after a heavy rain, its under drainage is not up to par. Glads require soils slightly acid, perhaps about ph. 6.5. Most soils with good drainage and proper feeding will grow nice flowers, but sandy and light soils grow better looking bulbs. If you have the land available, it is best to use the same soil about once in three to four years in rotation with other crops. When planted in rows like you do potatoes, plant large bulbs about 4 to 5 inches deep and medium about the same, smaller bulbs may be planted a little more shallow, perhaps 3 to 4 inches and if you plant bulblets, sow them in drills as you would garden peas, plant as early as soil can be made ready as they take much longer to germinate and a little extra watering to start them will give much better results. Bulblets can be planted about two inches deep. In quite heavy soils you can plant a little more shallow. For spraying, storing, dipping, etc., read our article on thrip. Soils may be built up from year to year by plowing under well rotted manure each season. When we plant we mix well with the soil some good garden fertilizer like 5-10-5 acid, often called truck grower. Additional feeding often will assist in getting finer blooms. We prefer some liquid form of fertilizer like manure water made from old well rotted cattle manure or some reliable liquid fertilizer that can be mixed with the water and then the water poured around your plants until it soaks to the roots. If you only pour on a little, it may not reach down to the roots, so be sure the roots get wet from the application. One such watering a week should be ample. Read all the articles we have in this catalog, as they all will assist, to help you grow better glads.

GARDEN AND HORTICULTURAL BOOKS, a twenty-four page catalog available for those who purchase text books on garden subjects.

HARDY PHLOX

Wonderful for a profusion of bloom for summer and fall color. We offer standard divisions, prepaid, at 25c per plant, \$2.00 per 10, with 5 roots at the 10 rate. The nomenclature of Phlox are not as well classified as with glads, peonies, iris, etc., so we offer these as we have purchased them from a dealer who has offered them a long time. If we are out of any one variety, we will send you two plants for each phlox variety under name that we cannot supply on your order. These will all be correctly labeled. Variety name, given with brief description following our selection of 10 varieties, a total of ten plants, all labeled for \$1.75 prepaid, about April 15th or for fall planting.

HARDY PHLOX—Cont.

ANNIE COOK, soft lilac pink; BARON VON DEDEM: orange red; BEACON: cherry red; BRIDESMAID, white, crimson eye; CHAMPS ELYSEE: dark purple; ECLAIREUR: rosy magenta; EIFFEL TOWER: white, carmine eye; ELECTRA: rich amaranth; ENCHANTRESS: bright salmon pink, dark eye; FIREBRAND: flaming orange scarlet; FRAU ANTON BUCHNER: large white; GENERAL PETAIN: rose-pink, dark eye; GOLIATH: royal scarlet; LA VAGUE: mauve with carmine eye; MISS LINGARD: waxy white, very early; MRS. CHAS. DORR; MRS. JENKINS: early pure white; PALADIN: salmon pink, violet eye; PANTHEON: soft rose pink; PARACHUTE: bright mauve, white center; R. P. STRUTHERS: rosy red; RICHARD WALLACE: white with pink eye; RIVERTON JEWEL: mauve rose, with carmine eye; SALMON QUEEN, salmon; VON HOCHBERG: dark red; VON LASSBURG, pure white; WM. KESSELRING: large violet, white eye.

MUTANTS OR SPORTS



Plant mutations are commonly called sports. They seem to be more prevalent in some varieties of a species than in others of the same species. For instance, among the gladiolus, some of our leading commercial glads have produced many color sports and are likely to continue to produce such sports every year as they are inclined this way. Many varieties produce sports very frequently, among them Aflame, Minuet, Picardy and perhaps scores of others. One variety we have grown a very long time, in fact from the time it was listed at about \$25.00 per bulblet (is Mr. W. H. Phipps), in all our large production of this variety and in all the years we have grown it, we have never found a very distinct color sport or change in color. On the other hand the variety Paul Pfitzer has in past years produced so many different color changes each year that we discarded the variety.

In my personal opinion I think a vast number of sports are pulled out and thrown away each year as simply stray plants of some other variety, accidentally mixed with the stock, as you will find in large commercial plantings and often in small ones, that glads that are cut to be shipped or sold to florists are cut in the bud, or before first flower opens, and if the person is in a hurry as is often the case, the plant is likely pulled out as a stray plant, if the buds are of a different color or shade, and it does take considerable expert discrimination to detect a sport in the bud, before flower opens, and a radical change of color makes a variety look so different that even when in flower, the plant may be regarded as some other variety mixed with the stock. We use the term "color sport" to distinguish it from sports that produce plant changes other than color alone, we have found that the color sport, where only the color has changed to be the most common of such mutations, so we will confine this discussion solely to where just color alone changes, and the plant remains the same in all other qualities, if you label such a plant that has changed its color to some degree, and plant it under label separately the next season, it may continue to remain true to the new color change, but in many instances, you will find it back to its original color, as many of these changes of color, even very radical color changes only remain so for one season and then return to the original coloring, if such a color change stays the same for two or three years, then as a rule, you will find it established in its new color, as it is the product of a variety whose nature seems to be to produce color changes each year, such named sports, from Aflame, Picardy, Minuet, Marmora and many others, will go on and produce new sports of their own, as we have found, and they will also produce a few plants of the original variety, and no matter how well you "true up" your stock, you cannot prevent these color changes insofar as I know. So if you are a beginner, and you find a different variety mixed with your stock, it does not prove that the grower sold you mixed stock. You must first determine what variety the plant is to be absolutely sure where the fault lies. Remember "color changes" for both one season, and those that become permanently established are much more common than has been thought possible. We only find the truth of this by going to the trouble of labeling and growing separately all such color changes. When we do this a long time, in our case nearly twenty years, you can also prove something about the nature of color changes.

GLADIOLUS THRIP AND CONTROL MEASURES



Thrip in their adult stage are flying insects. They are very small, and for that reason are likely carried great distances by high winds, as are many other very small insects. In my personal opinion, I think one of the most prolific sources of distribution is by the "cut flower" method. Cut glads are now shipped and re-shipped about 12 months in the year, with the industry so large in the southern states, there is almost a continuous movement of cut flowers and I think it can readily be proven that many cut flower spikes of buds or bloom can harbor many adult thrip without much, if any, damage showing on buds or bloom, to the casual observer. You can take many such blooms and strike them quite a sharp blow and adult thrip will fall off the flowers. Such flowers may be given to our near neighbors. They may purchase them grown near or far, or they may be placed in local cemeteries. As soon as the spike dries up, it is concluded that Mr. Thrip will look for a new home and this may be your gladiolus patch, large or small. For this reason, even where you plant 100% clean bulbs you may very easily secure some outside infestation each growing season.

The Bureau of Entomology, Department of Agriculture, Washington, D. C. have stated that thrip (glad) do not overwinter outside where the winters are cold enough, so that soil is frozen for some time, however it is possible for thrip to overwinter on your bulbs, and if your storage temperature is above 50 F. in winter, the thrip will feed on bulbs, causing a brownish, rough appearance on flesh of bulb, referred to as "russetting." However, a similar appearance is sometimes caused by action of chemical substances like ammonia, etc., from hen manure. So, it requires some real discrimination to be sure it is damage from thrip and if it is, you should have no trouble locating thrip or their larvae, underneath the "husk" of your bulbs. The same is true when your plants are infested in your garden. There are certain indications of their activity. The plants are likely to have a "rust like" appearance near the leaf joints as well as near the soil level and the green foliage is likely to look streaked before the bud spike appears. On such plants as are infested, you will find the thrip in the leaf joints, after the buds form, most of the thrip on such a plant, will concentrate under the bud sheath of the buds, not an easy place to reach with a spray. By removing all infested spikes from infested host plants in all light infestations, we get most of the thrip on such plants, as they have largely concentrated in bud spike, burn or destroy such spikes and you will do much to maintain a high degree of control. Weekly spraying or more often if required, with some good spray material will do much to keep plants protected from thrip development. Start the spraying when glads are three to four inches high. We have not had to resort to general field spraying for the past 8 years due to proper control measures used.

THRIP DAMAGE: In very light infestations thrip may go almost unnoticed by the average person, as there is such a small amount of the "feeding larvae" the adults move about quite rapidly, while the larvae are concentrated where they hatch, and feed, so those places show distinct results of their activity. In very warm climates or in so called "hot spells" in the north, where temperatures often hover near 85-90, night and day for weeks, the conditions become ideal for the rapid increase of thrip. Even from moderate infestations, the general rule seems that with very light infestations, in moderate northern summers, thrip may not cause enough damage to require spraying. We are told that the complete life cycle of gladiolus thrip is less than 60 days, and that thrip eggs held for 60 days in cold storage would not incubate as thrip do not feed, hatch or develop at storage temperatures below 50 F. It has been concluded that a storage about 45 F. maintained for 60 days or more of the coldest part of the winter, should do much to assist us in control measures. Using a highly recommended dip, like Corrosive Sublimate, 1 oz. of C. S. to about 7 gallons of water and bulbs submerged in this for twelve hours, should produce the highest possible control results. Use such solution twice, then discard and make a new batch. The C. S. dissolves slowly in cold water by using hot water to dissolve and adding enough extra cold water to make 1 oz. to 7 gallons of water, we have a satisfactory double purpose dip, as this has been used for years in scab control measures. Bulbs may be permitted to dry off or may be planted wet, right from the dipping material. Do not use metal in contact with the C. S. solution. Where your storage rooms are warm or above 50 F. for much of the

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time, you can use naphthalene flakes to good advantage. It is best to use this material in early part of winter, before bulbs have a tendency to sprout. Small quantities of bulbs may be placed in paper bags or boxes and naphthalene added at the rate of one ounce to about 100 bulbs. Tie up, or seal bags and boxes with paper tape and keep in a room above 60 F. for several weeks, then remove the naphthalene and store bulbs in regular storage rooms. Even one single gladiolus plant in some neighboring garden that is infested with thrip and no control measures used, may result in a migration of quite a number of thrip to your garden, so it is a good plan when dipping your own bulbs to offer to dip small lots of neighbors bulbs at the same time to remove the risk of chance infestation. We know that dust from the so-called dust bowl of the west can be carried over several states by the air currents and no doubt insects as small as thrip are carried great distances. In fact, I think this has been proven by the Department of Agriculture.

LIST OF BEST GLADS



Giant Bloom REWI FALLU

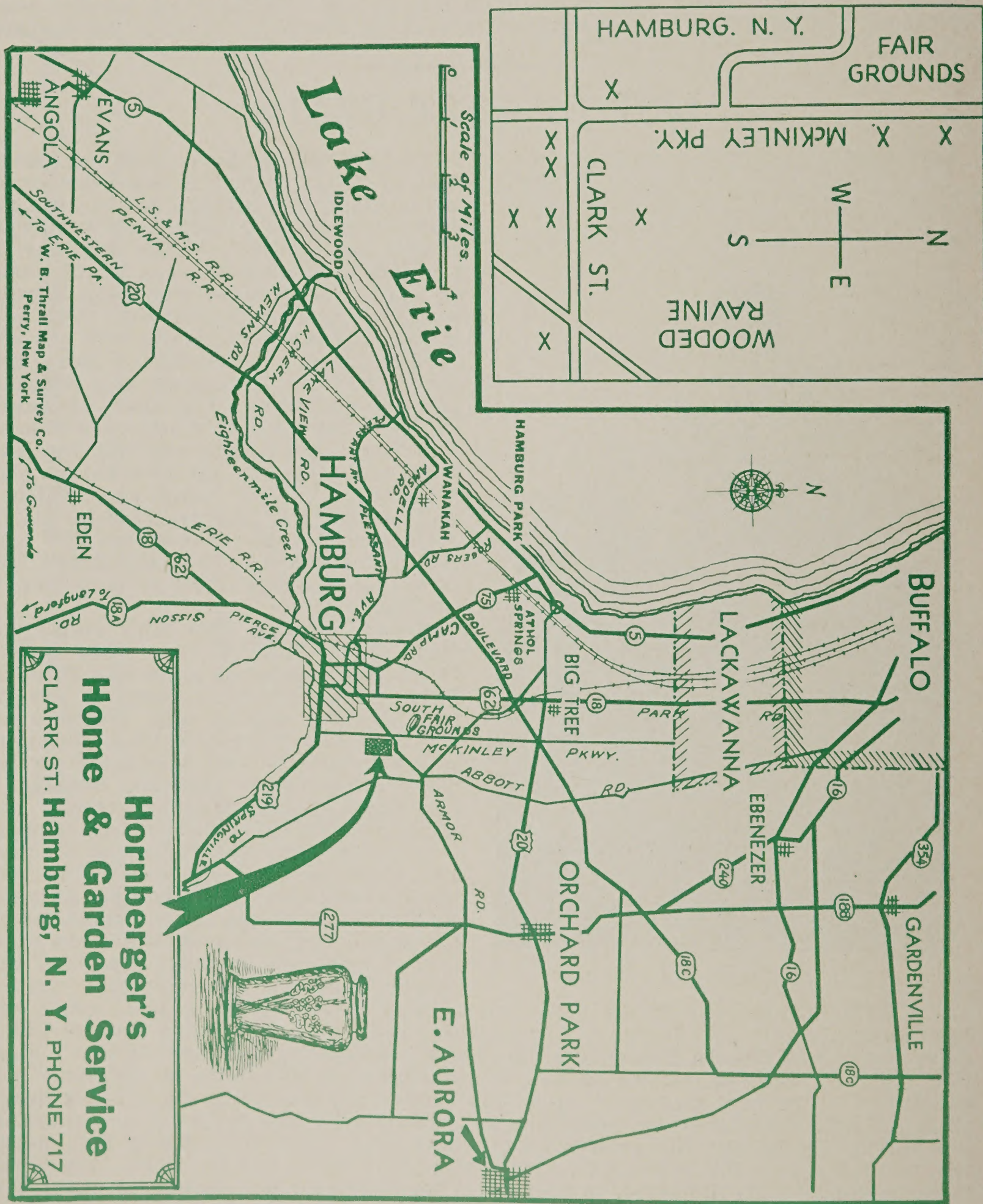
Perhaps there have been as many lists of "Best Glads" as there are growers of glads, and perhaps no two lists are just alike, and yet each grower may be honest and sincere. While this may be a puzzle to many persons, it is quite easy to explain. A grower who lives in your own state or even in your own town may have vastly different results with any one variety, in any one year. I have had long experience with glads in a commercial way and I know that there are many things that influence results. I will mention just a few briefly and tell you why I am not rating by my own rating plan I advocated a few years ago, which I still consider the most practical for giving each variety a fair chance, but this plan requires so much of the individual's free time that it is not likely to be workable for that reason.

Here in western New York even many small farms have a very wide variety of distinctly different types and kinds of soils and experience teaches us the effects of these various soils. While glads will grow and give nice average results in soils that may be very unsatisfactory for many other plants the fact remains if you want very outstanding results you must give to each variety the requirements to produce the variety at its best, and these requirements cover soils, climatic conditions, air, drainage, seasonal conditions unknown toxic conditions in any spot of soil, sub-soils, which are slow, fast or moderate in under drainage, and proper feeding, an important factor.

I have in mind one of the newer glads, well advertised at present, which has been quite high priced. We grew this for three years on a very sandy soil, on which many other well known glads gave fine bloom. However, this new variety I mention, did not seem impressive to me, in comparison with others in the same soil conditions. This past season we grew this variety, all size bulbs, on a fairly heavy loam soil and under growing conditions not as favorable and we got a real surprise. I could hardly believe the variety so outstanding on this more heavy soil, under less favorable growing conditions, yet results prove what can be done. Our fertilizing methods were the same, in past years we have told our customers about this fact. We have advised them to grow the variety Mrs. F. C. HORNBERGER in fairly good loam soils and plant to flower in September in latitude of Buffalo, N. Y.

A Map of Our Location

A map of our location is shown on this page. We are located about mid-way between Armor and Hamburg, N. Y. This year we have added a small guide map in the upper left hand corner to make it more convenient to see at a glance just where to find us. We have used the letter X to indicate houses or homes and our place is located with two letters—XX. We are located about 200 feet from the corner of Clark Street (Armor Road) and McKinley Parkway. Route No. 20-A crosses McKinley Parkway about 2½ miles from this corner and as you will note on small guide map, the Erie County or Hamburg Fair Grounds is within view of where we are located. Hamburg is nearly one mile to the west of us. To the east of us is a deeply wooded ravine and beyond that Armor. We are located about 15 miles from Buffalo, about 3 miles from Lake Erie, 12 miles from East Aurora and about 40 miles from Niagara Falls, N. Y. NOTE: Ravine, lower right corner on guide map, placed at an angle. This indicates a ravine and not a street.



PLEASE NOTE: CLARK STREET on the official map, as well as on the large map above is given as ARMOR ROAD. By long usage it has become generally known as CLARK STREET.